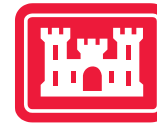


HEARTLAND ENGINEERS

*A Century of Superior Service
1907 - 2007*



**US Army Corps
of Engineers®**

Kansas City District

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Much of the history of U.S Army Corps of Engineers, Kansas City District, has been set forth in various historical documents as well as through oral renditions by long-time employees; the facts as represented here are accurate to the best of the company's knowledge. Various Internet websites were utilized to verify or supplement facts and were not quoted verbatim. The information utilized from such websites reflects the content on the websites at the time the research was performed.

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COLONEL ROGER A. WILSON, JR.

In 1907 the Corps of Engineers established an office in Kansas City "...to explore the feasibility of improving navigation on the Missouri River." That office eventually became a District Headquarters. From this humble beginning, the Kansas City District is now considered a full-service District with environmental services, military construction, civil works construction, and operations responsibilities across portions of five states in the Midwest. It is one of only 18 Districts of the Corps' 45 to perform a military construction mission. The District has constructed hundreds of miles of levees and oversees those and many more constructed by others along the Missouri River and her tributaries. The District uniquely supports the Environmental Protection Agency in two separate geographic regions of the country, Region VII in the Heartland and Region II in the Northeast.

For over 100 years the Kansas City District stepped up to every challenge and served the Heartland and Nation with great distinction. It has done so during times of armed conflict, even sending its own overseas to aid war fighters and host nations during hostilities. It has done so during severe economic depression and times of great prosperity. It has done so in times of drought and disaster as witnessed during the 1935, 1951 and 1993 great floods. And, it has done so during periods of intense political, cultural, natural resource and environmental awareness. Throughout these times, the District stood ready, answered every call to duty and made a difference in the lives of people.

To commemorate the District's first 100 years of service and the myriad of outstanding accomplishments, I'm honored to present to you "Heartland Engineers: A Century of Superior Service." While not all encompassing, this book is representative of the major accomplishments of the District since it was established in 1907, and it pays tribute to the men and women, past and present, who achieved such greatness.

As we look forward to our next century, we are now confronted with our own set of seemingly insurmountable challenges ranging from an era of persistent conflict to global climate change. However, like taming a river for navigation, I'm confident we will meet these contemporary challenges and contribute to the rich heritage of the Heartland Engineer.

I want to thank all my predecessors, the commanders, who guided and led this District to the place it occupies today – a respected, service oriented agency of professionals. And, I want to thank those that participated in the completion of this important keepsake celebrating our past. I trust you will use it as a showcase and source of pride, and I hope you enjoy it for many years to come. Congratulations and good luck during the next 100 years!

Building Strong!

Colonel Roger A. Wilson, Jr.
42nd Commanding Officer
Kansas City District



A very special thanks to all past and current Kansas City District employees who have contributed institutional knowledge, photographs or both to the successful completion of this Centennial book.

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Sincerely,

David S. Kolarik,

Kansas City District Public Affairs Officer





George Washington appointed the first engineer officers of the Army on June 16, 1775, during the American Revolution, and engineers have served in combat in all subsequent American wars. The Army established the U.S. Army Corps of Engineers (USACE) as a separate, permanent branch on March 16, 1802, and gave the engineers responsibility for founding and operating the U.S. Military Academy at West Point.

In 1803, President Thomas Jefferson commissioned U.S. Army Captain Meriwether Lewis and Lt. William Clark to explore the northern portion of the recently acquired Louisiana Purchase in hopes of finding an overland route to the Pacific. Their expedition was called the Corps of Discovery, and their years of exploration, mapping, navigation and studies of the environment would lay the foundation for the USACE as a unique organization of experts across multiple disciplines.

Since Lewis and Clark returned from their expedition, the USACE, more commonly referred to as “the Corps”, has had very close ties to the Missouri River and its numerous tributaries. The Missouri River in its natural meandering state was infamous for its constantly shifting channels and erosive forces that ate away its banks and turned its waters the color of mud. Violent floods in the spring and summer devastated communities along the banks and inundated valuable agricultural and industrial acreage.

Photo left: The dredgeboat Meriwether Lewis



Since 1907 – continuing the early work of the Corps in pegging down the river – the Kansas City District has removed snags, protected banks, constructed navigation channels and built extensive flood control structures along the Missouri River, thus providing important socioeconomic benefits to the Heartland and the entire Nation. Throughout the years, legislation has further enabled the District to incorporate other benefits into its projects. From water supplies and hydropower, to recreation and transportation, the mission of the Corps has grown and changed much like the rivers of the Region.

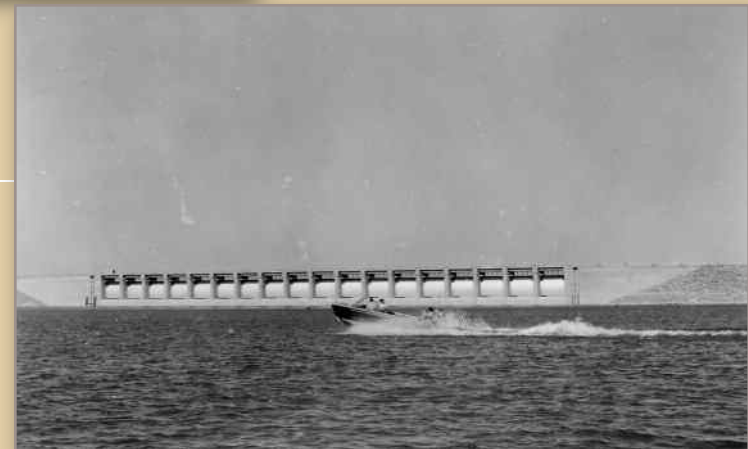
The World War II era brought major changes to the District. The Flood Control Act of 1938 launched several decades of dam building for the District, beginning with Kanopolis Lake in 1940. This era also saw major changes in the District's military mission. The Corps was called on to design and build the infrastructure necessary to accommodate the expanding and evolving Armed Forces. For over half a century, the District has spearheaded massive construction projects including ordnance facilities, state-of-the-art training facilities, airfields, hospitals, barracks, dependent housing and amenities. The Cold War era brought even greater challenges for the District, as it had to keep pace with the new weaponry advances and build structures fast enough to support them.

By the 1970s, the Nation began to focus on environmental issues. The legacy of the Cold War left numerous former defense sites that stored and utilized hazardous sub-



*Visitors Center at
Smithville Lake*

*Public boating at
Harlan County Dam*



*New construction at
Fort Leavenworth*

Great Flood of 1951



*Brush Creek
improvements,
Kansas City*



*Towboat pushing
barges up the river*

stances which may later pose a threat to the health of the general public. The Kansas City District was called upon to assist the Environmental Protection Agency (EPA) to perform massive cleanup at Superfund sites throughout portions of the United States. The Department of Defense (DOD) also assigned the District to manage and clean up radiological waste generated from the development of nuclear weaponry, under the Formerly Used Sites Remedial Action Plan (FUSRAP) for the Department of Energy as well as Formerly Used Defense Sites (FUDS). Much of that work continues today.

Cleaning up the environment also meant cleaning up water sources and restoring the habitat of fish and wildlife. USACE has regulatory responsibility over the Nation's wetlands. In recent years, the District has partnered with a wide range of federal, state and local agencies and organizations to restore some of the Missouri River's ecosystem back to its natural state. This decades-long effort is providing protection for endangered species that make the Missouri River their home. The effort also expanded the opportunities for recreation and use of the river for residents and visitors who come to explore Lewis and Clark's "Gateway to the West."

For all of its many accomplishments, the Kansas City District has relied on countless dedicated personnel who have worked and served with great pride for many years. We celebrate these accomplishments and honor the contributions made by our people and partners each and every day.



*Blue Springs Lake
and Dam, 1980s*

USACE vessel Sgt. Floyd



*Kansas City constructed
the Turkey Creek Tunnel
in 1919*

*Boat unloading at
elevator and freight
house, Hermann, MO*



*The District is currently
rehabilitating the
Turkey Creek Tunnel*

Great Flood of 1951



Aerial of Missouri River modifications, 1953



District construction along the Missouri River



Great Flood of 1993



Large debris washed ashore





REIGHTING ON THE MISSOURI WILLISTON N.D.



In 1907, the Sioux City Office of the Army Corps of Engineers, along with its mission, was moved to Kansas City, Missouri and designated as the Kansas City District. Capt. Edward H. Schulz was appointed as the first District Engineer.

The most pressing need for the District was to continue to improve navigation on the sprawling and constantly changing Missouri River. Schulz knew that improvements in navigation could provide a boost to the local economy, and he set out to convince Congress of the same.

In 1908, armed with records from the locally formed Missouri River Valley Improvement Association, Schulz informed Congress how the farming economy was losing millions in potential revenue due to slow shipping on the rivers and skyrocketing railroad freight rates. River channel improvements would provide shipping alternatives and more competitive freight rates. What's more, channeling the river would help slow erosion of the banks, resulting in more usable land along the river for crops and increased prosperity for the Region.



Snagboat Mandan from bluff in left bank, Missouri River, July 12, 1912

Photo left: *Freighting on the Missouri, Williston, ND, 1913*



1908
First
Model T



1910
Hallmark
founded



1912
Titanic
sinks



1914
World War I
begins



1914
Union Station
opens

Schulz's efforts were successful. In 1910, Congress authorized \$1 million in funding to create a permanent six-foot navigable channel between Kansas City and St. Louis, as well as an additional \$300,000 for channel modifications between Kansas City and Fort Benton, Montana.

One effective process Corps engineers used to deepen the channel was by building dikes that would slow and filter the water, but not block its flow. Mattresses of willow branches were woven together that would help trap the sediment flowing downstream. After a couple of years the sediment buildup would form manmade sandbars. These sandbars could then protect the bank from erosion, turn the current in a certain direction, and help in the narrowing of the channel. Ultimately, the sandbars could create a swifter current that would carve the bottom of the channel into a navigable depth.



Constructing revetment weaving mattress and grade bank, Council Bluffs, IA



Granite rocks were sometimes used to weigh down mattresses



Workers build mattresses on a barge

Removing left abutment at Flowline bridge. Barge loaded with 25 yards of stone and ready for timing to Missouri River, August 27, 1913



Steel rings and I-beam removed from tubes, August 27, 1913

Steamboat August Wohlt loaded with wheat, corn and produce, May 4, 1918



By 1912, Congress adopted the “Ten Year Plan” for developing the river, which called for \$2 million per year for systematic river improvements. Although Congress never actually provided the full funding, authorization of the plan sparked local interests to invest in development as well. Over \$1 million dollars was pledged to create steamboats to run between Kansas City and St. Louis. Port facilities were constructed in St. Louis, and \$75,000 in bonds were issued for building port facilities on the Kansas City riverfront.

Navigation on the river soared. In 1911, the river had hosted 63 shippers and 1,084 tons of freight. Just three seasons later, in 1914, the numbers jumped to 221 shippers and 13,677 tons of freight.

Unfortunately, with the onset of World War I, funding decreased and the momentum was lost. By 1915, channel improvements were only 14 percent complete. And by 1916, funding had ceased altogether. While the initial goals of the Corps were put on hold, much was accomplished to establish the future of the Corps missions and its plans for the river.



*Barges for JW
Thompson, 1909*

*Workers use timbers to
help reinforce the bank*



*An example of
bank erosion*

*A steamboat sinks in the
middle of the Missouri
River. Removing hazards
to navigation and
improving the movement
of freight on the Missouri
River was the primary
mission for the Kansas
City District when it came
into existence in 1907.*



*A snagboat at Gasconade
harbor. Snagboats helped
clear the river of debris.*



***At 2,320.7 miles the Missouri is
America's longest river.
It is 2.5 miles longer than the
Mississippi River.***

*Looking south from Big
Manitou Bluffs along
Missouri River*



map of
Lewis and Clark's expedition



“The Missouri River was the second muddiest river in the world before it was regulated and controlled. Scientists determined that it carried almost three times the silt of the Nile River in Egypt. Only the Colorado River had a heavier silt content.”

– John Ferrell, *Soundings*





The District's second decade brought the challenge of meeting the needs of local river interests during a time when national interests were opposed to further development of the river, in part because of the need to reallocate resources in support of World War I.

In 1918, the Kansas City Navigation Company sold its boats and barges to a federal barge line operating between St. Louis and New Orleans. Congress saw the Mississippi River as a "better river highway" than the Missouri, because it had a deeper channel and could carry more tonnage in assisting the war effort.

As a result, traffic on the Missouri declined significantly and many improvements fell into disrepair. By 1921, only a little over a third of the original plan for a six-foot navigable channel was complete, and the improved areas downstream of Kansas City could only report a low water depth of four and a half feet.



Workers inspecting dike structure

Photo left: Snagboat on Missouri River



1918
World War I
ends



1920
Women win
right to vote



1922
Walt Disney opens
first animation studio
at 31st and Forest



1926
Liberty Memorial
dedicated



1927
Babe Ruth hits 60
home runs in one
season

Local river development interest groups were unwavering in their attempts to see the District's original navigation efforts continued, despite recommendations to the contrary. In 1923, the Mississippi River Valley Association was successful in convincing Congress to appropriate \$1.2 million in improvements. The District resumed work on the river, but the limited funds only allowed for repairs to existing revetments and progress was slow.

In 1925, as a sign of increasing federal interest in water resources development, Congress ordered The Secretary of War and the Federal Power Commission to study the options of combining navigation, hydro-power, flood control and irrigation works. The agencies responded with 308 Reports. The resulting studies from "308" would ultimately serve as the basis for the District's plan for development of the entire Missouri River Basin for years to come.



*Construction of a Louisiana
Railway car barge*



Sioux City waterfront



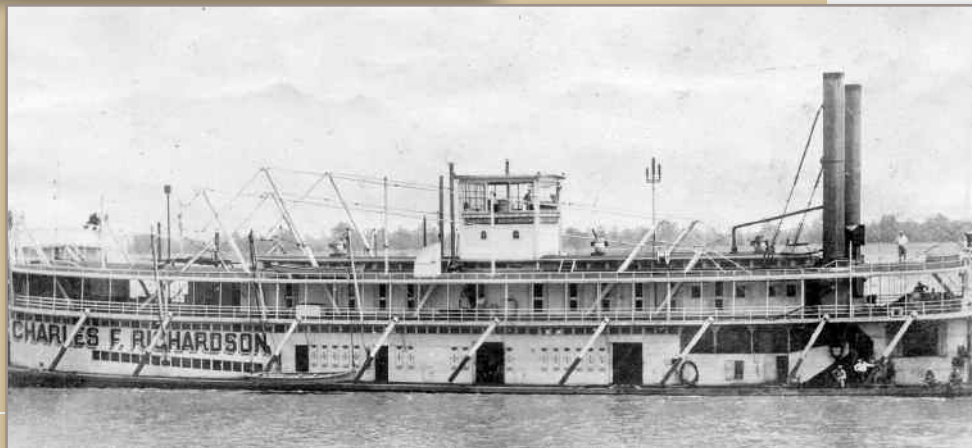
*Dredgeboat Patricia
Barrett, built in 1926*

*Caving bank partially
graded, showing willow
mat ready for paving stone*



Concrete beam crib dike

*Charles F. Richardson,
built 1921*



By October of 1925, another local organization dedicated to river navigation had formed: The Missouri River Navigation Association. At its initial meeting, the keynote speaker was then-Secretary of Commerce, Herbert Hoover. Hoover excited the convention with his vision of a nine-foot deep navigable channel in the Heartland, with further improvements extending upstream to Sioux City, Iowa.

Congress agreed to a revised version of Hoover's plan and in 1926 appropriated \$12 million for the project. Channeling the river would resume again with many of the same methods originally proposed by Corps engineers in the late 1800s. They would build structures to guide the current and trap silt, forcing the river to carve out its own channel.



Construction nearly complete on the towboat Sarah Edenboon



Bank erosion threatens a crop of corn



Hydraulic grading on bank



Workers taking a break during railroad bridge construction



First "Kellner Jetties" built near the foot of Dorman Street. Patented by Mr. Kellner of Atchison, Kansas – October 1925



The average lifespan of a Missouri River steamboat was 5.7 years. Twenty percent of these boats sank before their third season.

*Removing a
sunken steamboat*







Despite an influx of funding in the late 1920s, most of the traffic on the river was limited to hauling materials used for the navigational improvements. As the Great Depression took its toll on the national economy at every level, the transportation needs on the river all but disappeared. Relief came in the early 1930s in the form of President Franklin Delano Roosevelt's New Deal and the subsequent National (Industrial) Recovery Act (NIRA), which provided job opportunities to unemployed workers in part by allowing the President to approve new water resources projects.

Work on the river began again, and the economic relief allowed the Kansas City District to expand their regional client base and focus on flood protection in areas adjacent to the river. It was estimated at the time that over two million acres of urban and rural land were susceptible to devastating floods, at the expense of \$4.5 million annually. In 1933, the Missouri River Division was established as a way to more efficiently meet the challenge of the vast projects assigned to the Kansas City District by the NIRA. The Kansas City District boundary

changed from the entire Missouri River basin to the lowermost states in the basin.

Photo left: Laborers building mattresses, 1931



Stopping small leaks during high water, Gasconade, MO, June 20, 1928



1931
Star Spangled Banner
becomes
National Anthem



1931
Empire State
Building completed



1933
Kansas City
Massacre



1935
Municipal Auditorium
opens



1935
Social Security Act
signed into law

Protection from floods as a mission for the Kansas City District gained even more momentum in 1933, when the District released its 308 Plan, as called for by Congress in House Document 308 in 1926. The plan presented an extensive study of the entire Missouri River Basin, taking into consideration how flood control measures could be effectively combined with other water resources developments like navigation, irrigation and hydropower.

The 308 Plan recommended a system of reservoirs and levees to protect local communities during flood conditions. It called for continued work on the six-foot navigable channel, extending it from Sioux City to Kansas City, as well as expanding the existing project to create a nine-foot navigable channel from Kansas City, MO to the mouth. The plan also proposed the first dam for flood control at Fort Peck, MT, which was part of the Kansas City District at that time. The Fort Peck reservoir would store headwater to supplement low water flows, and help maintain project depth for the six-foot and nine-foot navigation channels. Additionally a reservoir near Topeka, KS was recommended to supplement Fort Peck and control flooding on the Kansas River.



*Wood Bros. construction
tow, 1928*



*Laying timber for
mattressing, early 1930s*



*Taking a break from
hard work on the river*

*Loading dock for rock,
Sioux City, Iowa, 1932*



*Workers cutting
timber, 1936*



Kansas dust bowl



Finally, the 308 Plan called for development and construction of a reservoir system on the Upper Missouri River that would use water for power and navigation.

When President Roosevelt and Congress started the Fort Peck Project under the NIRA in 1933, thousands from all over the country converged upon Montana in hopes of finding work after the devastating losses of the dust bowl and Great Depression. More than 7,000 men and women were employed to work on the dam itself, while thousands more set up businesses in the surrounding areas to support the workers and their families.

Corps engineers were charged with rapidly developing new techniques and solving extensive technical challenges. The complexity of the mission was described by Maj. Clark C. Kittrell, Fort Peck's District Engineer in the 1930s: "No engineering job of this magnitude had ever been attempted with so short a time for planning." Little did he know how prophetic his words would seem in the ensuing years as the District's roles and responsibilities expanded.



*Dredge pipeline
floating on water*

*Rock Bluff Bend
Revetment, 1933*



*Old wood dike that has
fulfilled its purpose,
Baltimore Bend*

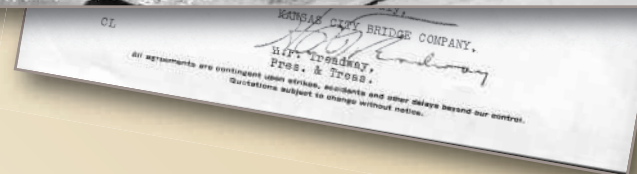
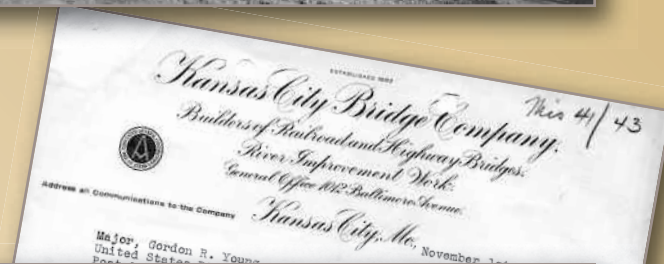


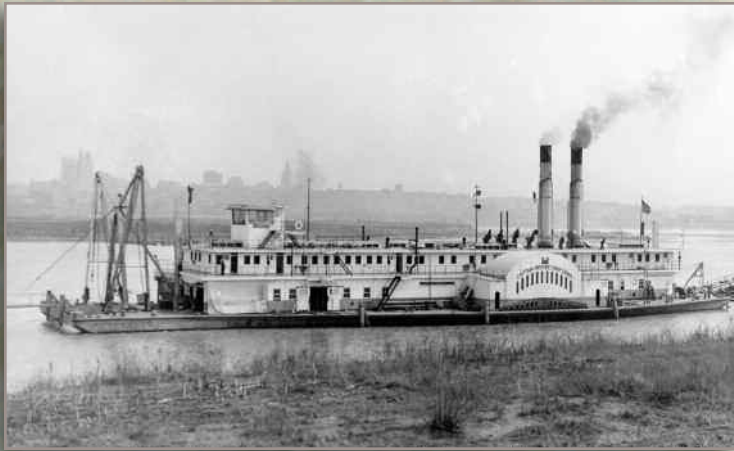
*Workers making string
dike, Camden Bend, 1936*

*Bridge
construction,
1928. Bridge
building was
another large
part of river
improvements
made by the
District*



*KANSAS CITY BRIDGE CO.
Red River Bridge, 1928*





Captain Meriwether Lewis dredgeboat, capable of sucking and discharging 3,000 cubic yards of sediment an hour

An excerpt from FDR's speech at Fort Peck Dam, August 1934



President Roosevelt visits Fort Peck Dam, August 6, 1934

Now people talk about the Fort Peck Dam as the fulfillment of a dream. It is only a small percentage of the whole dream covering all of the important watersheds of the Nation. One of those watersheds is what we call the watershed of the Missouri River, not only the main stem of the Missouri, but countless tributaries that run into it and countless other tributaries that run into those tributaries. Before American men and women get through with this job, we are going to make every ounce and every gallon of water that falls from the Heaven and the hills count before it makes its way down to the Gulf of Mexico.

It is because we have undertaken this gigantic task that will take us more than a generation to complete, because we have undertaken it now, and the people of the United States understand the objective of the idea, that I feel very certain we are going to carry it through to a successful completion.

That is one reason, my friends, the chief reason, that I am glad to be out in these parts today to see the work in its inception; to see the fine spirit of all the people who are engaged in the work. That is why, also, that I am very confident it is going to be carried through to the success and glory of the Nation.





Kansas City District's fourth decade saw the greatest expansion of its role in serving the Nation. With the growing specter of another world war looming, the military needed to quickly build facilities for housing and training the growing number of troops being inducted. Military planners called on the "Heartland Engineers". The Kansas City District represented a logical entity to provide these vital services. Its personnel were most familiar with local resources and construction capabilities and its engineering expertise was unparalleled. An intensive schedule of massive military construction began in 1940.

The District's civil works lost its priority to the war effort, but in the years preceding WWII the District reached an important milestone. In 1938, it was estimated that \$164 million had been spent on river improvements from Sioux City to the mouth. The river projects to date had saved an estimated \$24 million in maintenance costs and an additional \$50 million in value from land secured by channeling, as well as \$10 million in land created by river control. The combined benefits amounted to approximately 52 percent of the projects cost.

"The work of the District and the benefits it delivered to the people of the Heartland Region of the Missouri Basin had expanded far beyond the assignment which the Army engineers had been given a

half a century earlier."

– John Ferrell, *Heartland Engineers*

Photo left: Workers reinforce the river bank with asphalt, 1939



Construction began on Kanopolis Dam in 1940



1939
World War II
begins



1941
Attack on Pearl Harbor/
US enters WWII



1941
Grandview Airport
opens



1945
Harry Truman becomes
33rd President of the
United States



1945
World War II
ends

As World War II escalated overseas in 1940, the District's mission expanded to include extensive military construction. Design and construction began immediately on Lake City and Weldon Springs ordnance facilities. The North American bomber plant and airfield was built in the Fairfax district at Kansas City. Fort Leonard Wood was built as a major training facility. The Corps completed 1,600 buildings in just six months – even though challenged by rough terrain and uncooperative weather conditions. Forts Leavenworth and Riley received new airfields and support facilities. Over 81 construction projects from the Army Air Corps were reassigned to the District in 1940.

In 1941, the District's already impressive military construction schedule was greatly accelerated. From February to May of that year, construction expenditures doubled. Jayhawk and Kansas ordnance facilities were designed and constructed. The District's military construction responsibility was expanded even more throughout Missouri and Kansas, and in 1942 an area office was opened in St. Louis. In total, more than \$900 million was spent on defense construction in the Heartland during the WWII era.

Even the river itself played an important wartime role as the Corps provided navigation support and oversaw the construction of a variety of vessels for use by the Coast Guard. In 1943, however, flooding in the basin turned attention away from the war



*Assembling B-25 bombers at North American Aviation, Kansas City, KS, 1942
(Photo courtesy Library of Congress, LC-USW36-238)*

Construction at Fort Leonard Wood, MO, 1941



*War Department Theatre, Fort Riley, KS
(Photo courtesy U.S. Calvary Museum, Fort Riley, KS)*

*Discharge barge depositing
soil behind levee, in
connection with the
construction of the Liberty
Bend cutoff, 1947*



*Dam construction
workers on the front of
the truck are acting as a
counterweight for the
load of rock in the bed,
September 1939*

*Early construction at
Kanopolis Lake*



and the Corps was asked to review previous flood control plans. Through the Missouri River Division, they submitted the Pick Plan, which was ultimately merged with the Bureau of Reclamation's Sloan Plan. The resulting Pick-Sloan Plan was approved as part of the Flood Control Act of 1944, and provided for eventual construction of 316 project units, with 112 dams capable of storing 107 million acre-feet of water and generating up to 2.6 million kilowatts of hydroelectric power. It also called for hundreds of miles of levees and flood protection structures.

With the end of the war in 1945, the Nation could once again turn its attention to the homeland. Several key pieces of legislation were passed that would have long lasting effects on the District's civil works. The Rivers and Harbors Act of 1945 allowed for a nine-foot navigation channel downstream from Sioux City. The Missouri Basin Inter-Agency Committee was formed, as directed by Congress, to provide integrated planning and coordination with local interests in water resource development. The Fish and Wildlife Coordination Act required planning to prevent loss of fish and wildlife when building dams and other structures on the Missouri River. The Water Pollution Control Act encouraged creating uniform state laws to control pollution.



*Construction of water
treatment plant, Fort
Leonard Wood, 1941*

*Machine shop of
William Mitchell*



*Construction of
Kanopolis control tower*

*William Mitchell dredge
boat. Operational in
April of 1938 at
Baltimore Bend of the
Missouri*



*B-25 bombers almost ready
for test flight, North
American Aviation,
Kansas City, KS, 1942
(Photo courtesy Library of
Congress, LC-USW36-140)*

*Canal at Rulo Bend,
Rulo, NE, 1938*



*Truss railroad bridge
over Kansas River, 1945*



*Aerial view of Jayhawk
Ordnance Facility*



*Wide view of truss
railroad bridge,
Kansas River, 1945*



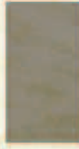
*Construction of Patton
Hall, Fort Riley, KS
(Photo Courtesy: U.S.
Cavalry Museum,
Fort Riley, KS)*





Massey's Garage

3rd Street



Farm Machinery



Lumber Yard



Tavern

Commercial State Bank

2nd Street



Furniture Store



Labor Union Office

?

1st Street

Furnas Street



Giest Foods

City Cafe

Phone Office

William's Tavern



Theatre

Liquor Store



Garage



Parsonage

Methodist Church



In order to construct the Harlan County Dam, the Corps had to move an entire town a few buildings at a time. Some of Republican City's original foundations remain underwater. When lake levels are low, visitors can explore the streets of Old Republican City.

The Weldon Spring Ordnance Works was the world's largest producer of TNT. The area of the Ordnance Works during its operational years was 17,232 acres. Remediation of the site continues to this day.







As the Kansas City District approached its half-century mark, the Corps took on the growing responsibility of serving and protecting the Heartland and Nation. The District saw continued expansion of river basin development as called for in the Flood Control Act of 1944. The first of these authorized dams, Kanopolis, opened in 1948, with completion of Harlan County Dam not far behind in 1952.

Flood protection, motivated by the Great Flood of 1951 and a flood in the Upper Missouri River Basin in 1952, galvanized both rural and urban interests to quickly arrive at a solution to this problem. The District expanded its basin studies and worked with the affected states to develop a coordinated plan addressing all major resources including recreation and wildlife. The subsequent Flood Control Act of 1954 authorized eight big dam and reservoir projects for the Kansas City District: Hillsdale, Melvern, Milford, Perry, and Pomona in Kansas; Stockton and Truman in Missouri; and Rathbun in Iowa.

Photo left: Soldiers help locals with sand bagging, 1951 Flood



B-47 Stratojet



1950
North Korea invades
South Korea



1951
Starlight Theater
opens



1955
H&R Block's first
office opens



1955
Rosa Parks and
Montgomery Bus Boycott



1957
Sputnik launched by
Soviet Union

Called the “Billion Dollar Flood”, the 1951 flood affected 116 cities and towns in Kansas and Missouri. The Kansas City Stockyards were devastated, Rosecrans and Fairfax airports inundated, the barracks at Fort Riley destroyed and 85,000 people were evacuated. Mother Nature wasn’t quite finished with the District. The area experienced a serious drought that lasted approximately four years, which demonstrated the need for water storage and resulted in Tuttle Creek’s “dry dam” restriction being removed.

Construction began on Tuttle Creek in 1952. In that same year Harlan County Dam opened. In order to build the Harlan County Dam, Corps engineers had to move an entire town – Republican City – a few buildings at a time. Some of the town’s original foundations still remain under water. When lake levels are low, visitors can explore the streets of the former town.

Following the end of WWII, the District’s military mission largely ended. However, with the onset of the Korean War the military mission was again revitalized. The Cold War era prompted the United States to keep the military in a high state of readiness to protect the Nation from attack. From this



*Devastating aftermath
of 1951 Flood*



*Horses trapped by
flood waters, 1951*



*Rescuing stranded
flood victims, 1951*

Tieville Dredging, 1955



*Opening of pilot canal,
Jackass Bend, 1957*



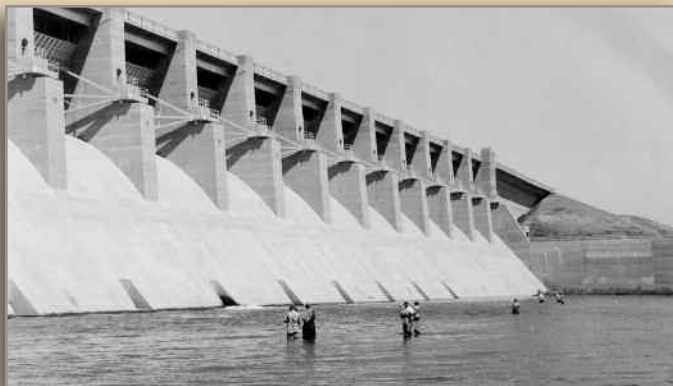
*Flood waters reach
rooflines and strand
homeowners, 1951*

threat, military readiness was given top priority. In order to maintain military readiness, the military needed infrastructure for troop training and air base construction away from major cities to limit collateral damage from a nuclear attack.

In 1951, the District was officially assigned a military mission with two major types of engineering tasks: modernizing and expanding facilities at five Air Force bases and three Army posts, and reopening ordnance facilities throughout the Heartland.

The air bases needed extensive renovation, new construction, and retrofitting of runways to accommodate the larger new bombers, like the B-36, B-47 and B-52.

Fort Riley was virtually transformed with a new hospital, regimental headquarters, gymnasium, chapel, family housing and barracks. Fort Leavenworth also received a new hospital, officers quarters and a new facility for the Command and General Staff College. Fort Leonard Wood was designated as a US Army Training Center-Engineer, and received new classrooms, barracks, family units and recreational facilities.



*Visitors flock to the
public fishing area at
Harlan County Dam*

*Newly completed
Kanopolis Lake*



*Tuttle Creek Dam
under construction*

*Harlan County Dam
administrative building*



*Pomme de Terre
groundbreaking
celebration, 1957*

*Soldiers from Camp
Carson, CO lend a hand
during flooding*



*Flood waters surround
local gas station, 1951*



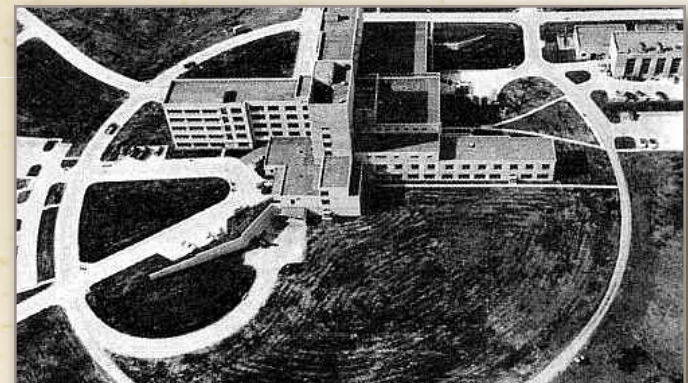
*Personnel housing,
McConnell Air
Force Base*



B-52 Bomber Takeoff



*Irwin Hospital,
Fort Riley*



The Kansas City Times

(THE Morning KANSAS CITY STAR)
KANSAS CITY, JULY 13, 1951—FRIDAY—32 PAGES

PRICE 5 CENTS

KAW ROLLS INTO ARGENTINE

Armourdale Is Evacuated by Most of 15,000 as River Rises Almost to Top of Levee—Situation Over the State Still Is Bad.

AFTER STRUGGLE ON LEVEE

Water Goes Over About a Mile Upstream From the Kansas Avenue Bridge, and Men Leave to Help the Residents.

INDUSTRIES ARE IN DANGER

Water Rushes Toward Plants in the Argentine District—Fights to Save Armourdale Plants—Exodus Ordered by City Officials in Order.

"Central Industrial District Safe." There is no danger to the Central Industrial district on the Missouri side from the flooding of the Kaw river, Col. R. P. West, acting chief of the Kansas City district of army engineers, said today.

Water seeping into the basement of the American Royal building was reported to be coming from flood waters on Turkey creek flowing toward the river.

Major Gen. Don Douglas of Omaha, chief of the army engineers for the Missouri river division, arrived here to inspect the situation in the Argentine district in Missouri today.

Shortly after General Douglas arrived, he flew with Col. R. P. West, acting chief of the Kansas City district, to Armourdale to inspect the situation.

Major General Milne, acting chief of the Missouri river division, said today that the situation in the Argentine district is serious.

Major General Milne, acting chief of the Missouri river division, said today that the situation in the Argentine district is serious.

KANSAS PERIL UP

Thousands More Now Threatened From Their Homes in Eastern Section of State.

Red Cross and Armed Forces have more than \$100,000 in aid for the victims.

Water rising to a level of 100 feet above normal in the Kansas river is threatening the lives of thousands of people in the state.

Roaring Kansas rivers spread terror and destruction throughout the eastern half of the state yesterday as nationwide forces were mobilized to aid in the disaster.

Thousands of people are being evacuated from their homes in the eastern section of the state.

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Roaring Kansas rivers spread terror and destruction throughout the eastern half of the state yesterday as nationwide forces were mobilized to aid in the disaster.

The Great Flood of 1951 – Water discharged at the rate of 573,000 cubic feet per second. That's more than double the amount of water flowing each second through Niagara Falls during peak season! By July 13, 1951 a total of 1,074,000 acres in Kansas and 926,000 acres in Missouri were flooded.

ABANDONED SHIPWRECKS ON MISSOURI RIVER CHANNEL MAPS OF 1879 AND 1954

BLUE MILLS TO LEXINGTON SECTION
MILE 358.3 - 323.4
MISSOURI RIVER
SHEET NO. 10 OF 14

MISSOURI

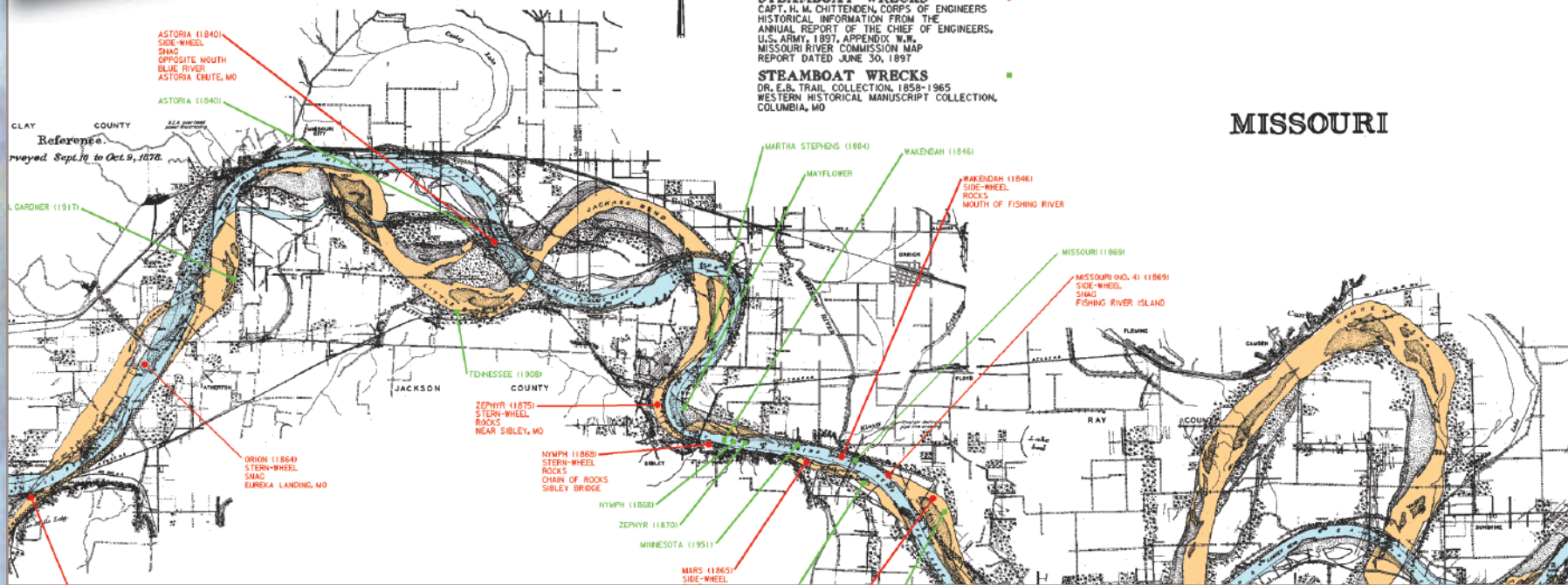
LEGEND

1879 CHANNEL

1954 CHANNEL

STEAMBOAT WRECKS
CAPT. H. M. CHITTENDEN, CORPS OF ENGINEERS
HISTORICAL INFORMATION FROM THE
ANNUAL REPORT OF THE CHIEF OF ENGINEERS,
U.S. ARMY, 1897, APPENDIX, W.M.
MISSOURI RIVER COMMISSION MAP
REPORT DATED JUNE 30, 1897

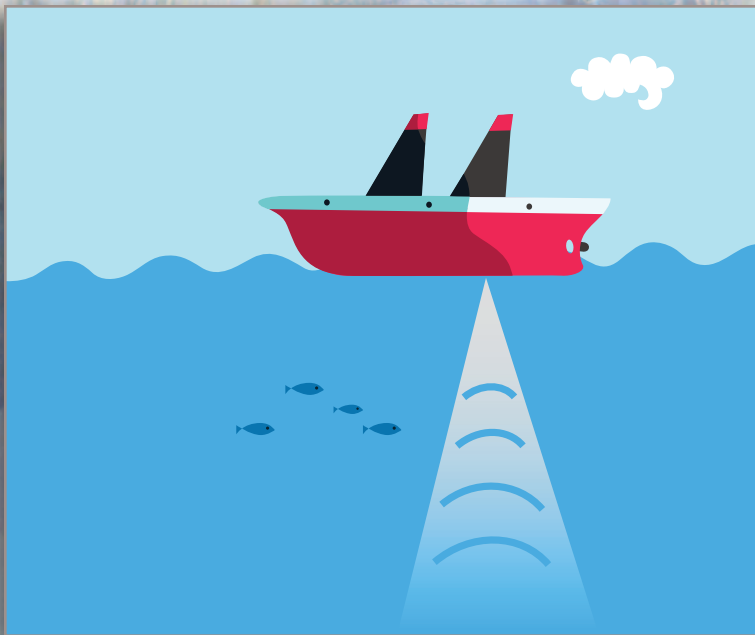
STEAMBOAT WRECKS
DR. E.B. TRAIL COLLECTION, 1858-1965
WESTERN HISTORICAL MANUSCRIPT COLLECTION,
COLUMBIA, MO



1951 Flood



Thousands take in this awe-inspiring spectacle that defies description.



The Kansas City District celebrates a half century, 1957

In 1957, the Corps began using depth sounders on the Missouri River. Depth sounding uses sound waves to measure the depth of water.







Urgency! The Kansas City District's sixth decade can best be described with that one word. Flood control and military construction projects grew at a seemingly impossible pace which pushed District engineers and contractors to their limits. Despite the immense challenges of this era, the District rose to the occasion with steadfast determination, ingenuity and flexibility.

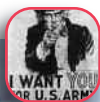
Flood control measures called for in the Pick-Sloan Plan were being engineered and constructed at great speed. In fact, the District started eight new dam projects in this decade alone – almost half of the 18 total dams to be constructed. The devastation of the 1951 flood was still fresh in the minds of the Corps and the public. Due to this devastation, there was continuing pressure to provide protection from future catastrophic floods as soon as possible.

The decade also found the Nation in a game of cat and mouse with the Soviet Union. Soviet military and missile technology was rapidly advancing. From this threat, President Eisenhower was determined to keep attacks at bay by countering each advancement in enemy military hardware with new and more sophisticated U.S. technology. This strategy of "deterrence" defined the Cold War Era. It also placed an incredible challenge before the Corps to provide the infrastructure necessary to support and maintain the constantly evolving military technology.



Construction of Topeka Atlas missile launch site, 1959

Photo left: Flooding of Pottawatomie Creek and Marais des Cygnes River, Osawatomie, KS, 1961



1958
Elvis Presley
joins Army



1959
Classic "Kansas City"
tops music charts



1963
MLK "I Have A
Dream" / March on
Washington



1964
Beatles play at
Municipal Stadium



1967
Chiefs in First
Super Bowl

New legislation further promoted the District to engage local interests in water resource development and broaden the scope and uses for dam projects. The District recognized the importance of these additional uses, such as recreation, in providing revenue for towns and states. In the Water Supply Act of 1958, Congress authorized states and local entities to ask for additional water storage in federal reservoirs for local use. In 1965, the Federal Water Project Recreation Act defined recreation as a legitimate purpose in planning federal water resources projects.

During the 1960s, eight dam projects were started (Pomona, Wilson, Milford, Stockton, Perry, Rathbun, Truman and Melvern), three of which would be completed in the same decade (Pomona, Milford and Wilson). At the same time, Pomme de Terre and Tuttle Creek were completed. The broadened purposes of dam building were evident in these projects. Recreation was a major aspect of Pomme de Terre's lake and Tuttle Creek provided water storage. Truman Dam was also being constructed with multi-purpose uses: flood control, recreation, hydropower and fish and wildlife conservation.

Near the end of this decade, the Corps was called into service in 1966 when deadly tornadoes roared through Kansas. Following the tornadoes, Governor Avery requested the District's skills and resources for recovery services.



Fishing from the bluffs, 1966

*Construction on
Stockton Dam, 1964*



*Visitors enjoy
recreation at newly
opened Pomona
Lake, 1966*

Aerial view of construction activity at Fort Riley, 1969



An example of a Minuteman II launch control facility located at Whiteman Air Force Base (U.S. Air Force photo/Tech Sgt. Samuel A. Park)



Barracks at Fort Leonard Wood, aerial, 1963

Service to the military brought with it the District's most demanding mission to date. President Eisenhower had approved an "emergency" new weapons system: the Intercontinental Ballistic Missile (ICBM). The Corps had the combined challenge of keeping up with the new weaponry advances while building structures fast enough to support them.

Glen Davis, Resident Engineer at the time, recalls, "We had two shifts working...and the only time you knew what day of the week it was is when you went to breakfast and the funny paper was in the rack...I averaged something like 70 hours a week for almost 2 years."

Operational missile bases were built at Forbes, Schilling, McConnell and Whiteman Air Force bases. The District gained invaluable "high-tech" knowledge of these missile silo projects. That experience served the Corps well when it was asked to build a precision instrument lab for the Air Force, and state-of-the-art flight simulation facilities at Forts Leavenworth and Riley.

The District also carried out numerous traditional military construction projects during this time. Fort Leonard Wood was expanded as a staging area. This required construction of administrative buildings, training facilities, barracks and mess halls. Building additions and improvements were made to Forts Riley and Leavenworth as well. In fact, between 1957 and 1961, the District built over 2,660 dependent housing units at all three forts.



*Towboat pushes
freight, 1964*



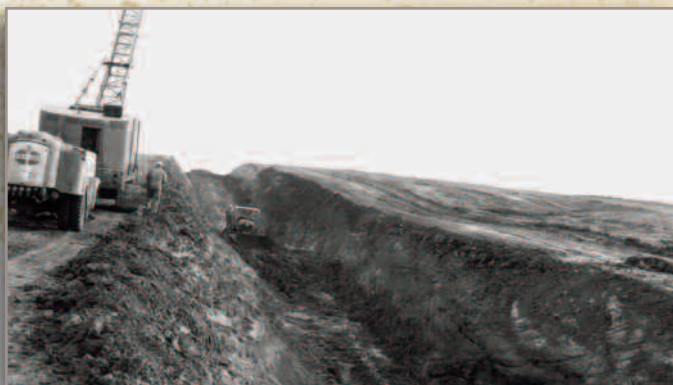
*Curb and gutter
construction at
Stockton Dam, 1964*



*Iowa Gov. Harold
Hughes digs in at the
Rathbun Dam
groundbreaking, 1965*



*Spillway at Tuttle Creek
Dam, completed 1962*



*Trench inspection
during construction at
Rathbun Dam, 1965*



*Barracks at Fort
Leonard Wood, 1963*



*Lakeside camping,
1966*



*Construction of
Pomona Dam, 1963*



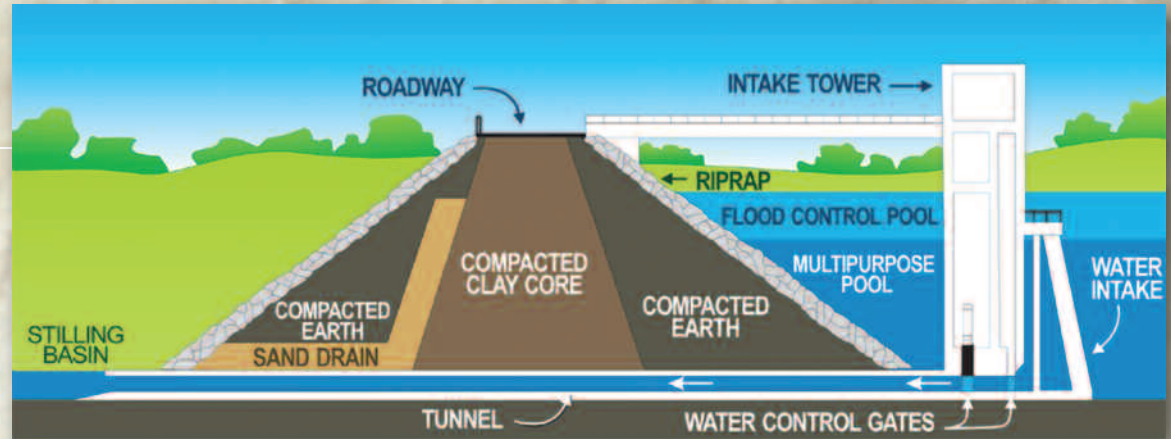
*Visitors preparing to
windsurf at Kanopolis*



*Smithville Dam
was authorized
in 1965*



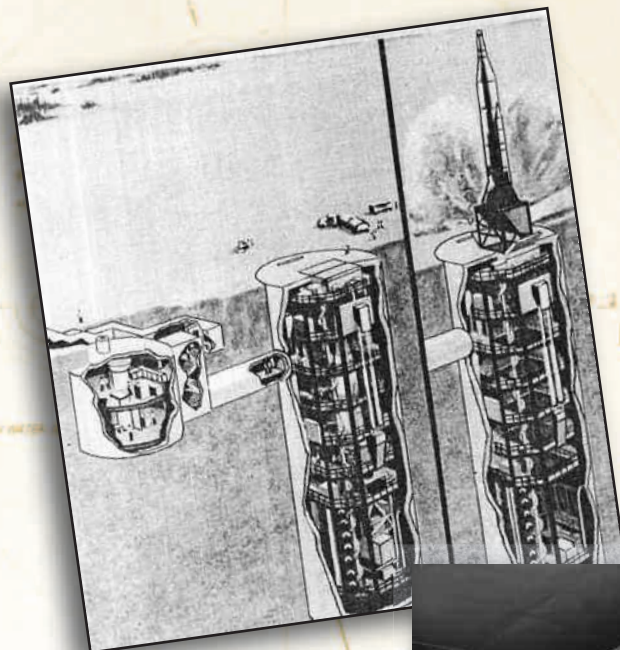
*Cross-section of a
typical earth-filled dam
in the District*



*Wilson Dam was
completed in 1965*



*Pomme de Terre Dam
was completed in 1961*



The Atlas-F was deployed in a 180-foot deep underground missile silo with its own launch control center. These silos were located radially around a main base, approximately 35 miles away from it. They were built in groups of 12.







By the early 1970s the District saw evidence that its efforts to permanently “peg down” the Missouri River had been successful. The channel was well over nine feet in most places, and there was less of a need for dredging because the river had become more or less self-scouring. Commerce on the river continued to expand. It was reported that 3.3 million commercial tons were shipped on the river in 1977.

During this time frame, the District’s civil works mission faced new public demands and changing values. President Nixon signed the National Environmental Policy Act into law. With this signing, the Corps responded with environmental guidelines for its civil works projects. As the nature of these civil works projects expanded, the Corps had to take on a balanced approach between existing water resource development policies and the new environmental and recreational policies. There was also pressure to add social science into the planning process. The District diversified and added a Planning Division to work in tandem with the Engineering Division.

Photo left:

Aerial of Stockton Dam, 1973



Recreation at Rathbun Lake



1969
Apollo
11 & 12



1970
Chiefs win
Super Bowl IV



1970
EPA
established



1976
Kemper Arena hosts
Republican National
Convention



1977
George Lucas
releases “Star Wars”

Five dams were completed in this decade: Perry, Stockton, Rathbun, Melvern and Smithville. The broader approach to dam building was reflected in some of the features of these new dams. Smithville has a very long shoreline, which is important because it provides habitat for fish and wildlife. Stockton also provides hydroelectric power. Rathbun has 55 square miles of land and water, all managed by the Corps. Although Clinton's dam was essentially completed in 1977, the Corps decided to slowly fill it over three years to improve fishing potential. This represented a determination to focus on the scope of the policies already in place.

A textbook example of the daunting challenge of dealing with conflicting policies in water resource development came in 1972, when the Environmental Defense Fund, (EDF) filed suit to stop construction of the Truman Dam. Among other things, they claimed that the District did not file the environmental impact study required by law. The U.S. District Court ruled that the District had "taken substantial and concrete steps" in preparing the study, even though the dam had been under construction for five years before the law requiring the study was enacted.



Construction of Smithville Dam was completed in 1977

President Nixon speaking at the Rathbun Dam dedication, 1971



Truman Dam visitor center perched atop Kaysinger Bluff

*Aerial view of Irwin Army
Hospital, Fort Riley, 1969*



*Inspection at
Fort Riley, 1969*

*Construction at
McConnell Air
Force Base*



The District's Chief of Engineering at the time, Paul Barber, was also an attorney and dedicated several months to working solely on the lawsuit. Barber recalls that the stack of papers the District filed as exhibits in response to the lawsuit was "four and a half feet thick."

As the end of the Vietnam War drew near in 1970, the Department of Defense announced a plan to greatly reduce and eliminate facility and manpower requirements for military missions. By July of 1970, the District's mission had been focused to one of civil works only.

The District's military accomplishments during the previous decades are unparalleled and remain a testament to its service to the Nation. The Kansas City District excelled in a variety of assignments, each with unique challenges, as they kept pace with rapidly evolving defense industry technologies while continuing the ongoing civil works missions. The District's work is a shining example of why the Nation relies on an experienced organization of highly trained, skilled and dedicated personnel who are always in a "ready" position to serve. In 1975, the Kansas City District was reassigned its military program mission, which it has had ever since.



*Construction at
Melvern Dam, 1973*

*Floodwaters surround
Jefferson City, 1973*



*Construction at
Clinton Lake, 1978*

*Cleaning up after Brush
Creek floods Country
Club Plaza, 1977*



*Gate closure celebration
of Stockton Dam and
reservoir, December 1969*

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Exhibit 10-10

In the early 1970s, after its military mission had been reduced, the District was asked by the U.S. Postal Service to design and build several facilities, including five bulk mail centers.



Since it began operation in 1969, Perry Lake has prevented over \$4 billion in flood damages. Total cost of construction was just under \$50 million, recouping its cost nearly 80 times over.

Note: "Standard" (or STD) may also be used.
(Standard Mail)



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The Kansas City District's eighth decade saw the District being tasked with growing responsibilities in environmental stewardship. Protecting, preserving, and restoring the environment was a top priority for the Nation. The District showed strong leadership in all these capacities. By 1984, over 282,000 acres of public land were being protected from resource degradation at sixteen different Kansas City District sites.

The District was assigned a military mission once again just before the decade began. At McConnell Air Force Base, the District designed and constructed support facilities for the state-of-the-art B1 stealth bomber, an important aircraft in the Nation's continued efforts in nuclear deterrence. With the recent switch to an all-volunteer armed forces, the Army and Air Force relied on the Corps to make their bases more appealing to potential enlistees, with upgrades to housing and new amenities.

The Nation's continued intense focus on environmental cleanup would keep the District incredibly busy in this and subsequent decades. In 1980 Congress passed the Comprehensive Environmental

Response, Compensation and Liability Act (CERCLA), more commonly referred to as the "Super-

Photo left: Restoring wetlands protects fish and wildlife



New construction at McConnell Air Force Base



1980
Mount St. Helen's
erupts



1981
Spirit of Freedom
Fountain dedicated



1981
IBM introduces
personal computer



1985
Royals win
World Series



1986
Challenger
explodes

fund Act". This act called for cleanup of hazardous waste sites that constituted a threat to public health. The EPA gave the Corps an assignment to assist the EPA nationwide with Superfund projects. The Missouri River Division was designated as the National Design Center for the Superfund Program and the Kansas City District was given authority for Superfund design assistance to the EPA for five of the 10 EPA regions.

Anne M. Gorsuch, EPA administrator at the time, said, "The Corps' field expertise and in-place capabilities throughout the country are just what the EPA needs to carry out certain aspects of the Superfund program." Between 1982 and 1987, the District would supervise over \$48 million in Superfund work – a number that would almost triple by 1988.

In 1984, the District's responsibility in hazardous waste cleanup expanded even further. The Defense Environmental Restoration Program (DERP) was established to identify, investigate and clean up hazardous substances and wastes at both active and Formerly Used Defense Sites (FUDS). Among the numerous responsibilities, the District would find and dispose of unexploded



*Cleanup of hazardous materials
at Weldon Springs Ordnance*

*Cleanup and demolition of
abandoned buildings at
Weldon Springs*



*Empty missile silo,
Whiteman Air
Force Base*

Clinton Lake was completed in 1980



Construction of Blue Springs Lake spillway, 1985



Truman Dam spillway

ammunition at ordnance sites and demolish unsafe and unsightly buildings.

This decade saw another important milestone for the District. After 75 years of hard work, the bank stabilization and navigational structures for the Missouri River were now complete. In addition, the effectiveness of the flood control dams was demonstrated when the Osage River flooded in 1986. The District's completed projects prevented an estimated \$244 million in damages to the surrounding area.

Large scale civil works projects continued in this era. Long Branch, Clinton, Hillsdale and Longview were completed, and construction began on Blue Springs.

Additional legislation was passed that would provide further opportunities for the District to work with communities in its jurisdiction. A wide range of environmental and recreational projects were enhanced as a result of this information. The Water Resources Development Act of 1986 changed the non-federal cost sharing requirements and expanded their roles in the planning, funding and management of projects.



*Shoring up the levee on
the Marais des Cygnes
River during the 1983
flood, Osawatomie, KS*

*Longview Lake
construction
began in 1979*



*Construction at
Clinton Lake, 1978*

*Aerial of road relocation,
Blue Springs Lake
construction, 1982*



*Blue Springs Lake
Dam, 1980s*



Local schoolchildren help Woodsy Owl clean up Truman Dam's recreational areas



Waddell Truss bridge restoration, 1983. The bridge was moved from Smithville Dam reservoir to Parkville, MO.

Aerial view of construction at Longview Lake



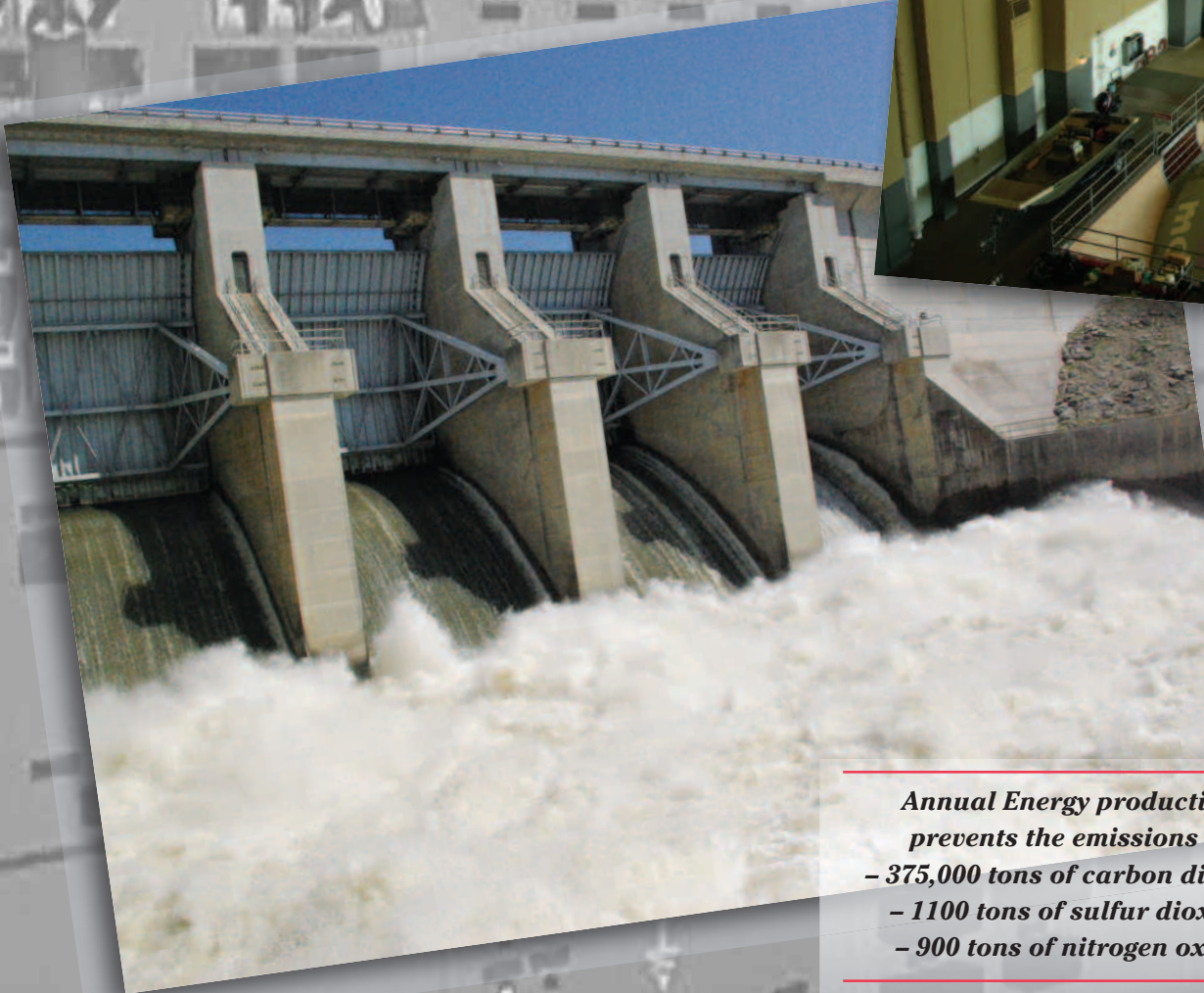
Long Branch Lake today. The lake was placed in operation in 1980



Current photo of Hillsdale Lake, which was placed in operation in 1981



The generating capacity of the Truman Power Plant is rated at 160,000 kilowatts.



Renewable energy produced by the Truman Power Plant annually offsets the use of approximately
– 216,000 tons of coal
– 747,000 barrels of fuel oil

Annual Energy production prevents the emissions of
– 375,000 tons of carbon dioxide
– 1100 tons of sulfur dioxide
– 900 tons of nitrogen oxide



The B-1 Bomber is the U.S. military's only variable-sweep wing aircraft, which means the wing may be swept back and then returned to its original position during high-speed flight.





In the early 1990s the District would provide a great example of the intent of the Water Resources Development Acts of 1986 and 1988 with its Brush Creek Project. The District had been working on designing and building flood control measures in the area – prompted by Brush Creek flooding in 1977 that devastated the affluent Country Club Plaza. At Kansas City's request, the District redesigned the project to include park and recreation features as well as beautification.

Phil Rotert, Chief of the Planning Division at the time, recalls, “there was just a tremendous amount of coordination and learning...particularly of how to design a project other than just a plain concrete channel that could be built, and then to figure out how much of it was going to be paid for by the city”. Rotert calls the innovative project “a very worthwhile effort.”

Another major flood struck the Missouri River Basin in 1993, and the District once again rose to meet the challenge. Roy Reed, then Chief of Programs and Project Management recalls, “during the early part of the flood we had people who were



Floodwaters threaten businesses in Parkville, MO, 1993

Photo left: Celebrating the completion of extensions to the Brush Creek project



1989
Fall of
Berlin Wall



1991
Emanuel Cleaver
elected first African-
American Mayor



1991
Desert
Storm



1995
Oklahoma City
bombing



1997
Grand Opening
American Jazz
Museum

voluntarily working 60 to maybe 80 hours a week, sometimes almost 24 hours around the clock.”

While the 1993 flood had devastating impacts elsewhere, Kansas City was left relatively unscathed because of the levee improvements and flood control structures the District had provided upstream in the wake of the Great Flood of 1951.

As in the five decades prior, The Kansas City District assisted the military in growth and operational readiness. In 1989, District engineers completed a successful move of the Army’s Engineer School from Fort Belvoir in Virginia to Fort Leonard Wood. Future engineers could now boast a new \$60 million state-of-the-art training and education facility. It was the first time in 50 years that all engineer training would take place at the same location.

The following year, legislation was passed that would require even more extensive construction at Fort Leonard Wood. The Base Realignment and Closure Act of 1990 (BRAC) called for the Department of Defense to streamline its operations by closing and realigning certain bases. By 1995, Fort McClellan in Alabama was ordered closed, and the U.S. Army’s Military



*Floodwaters engulf
Southwest Boulevard,
Kansas City, 1993*

*Aerial of Rulo,
Nebraska, 1993 flood*



*Fort Leonard Wood
Engineer School*

*New general instruction
building at Fort Leonard Wood*



Police School and Chemical School would relocate to Fort Leonard Wood. In preparation for the move, the District built specialized training and support facilities and a three-story general instruction facility that was connected to the Engineer School building. The construction cost estimate for these two moves alone was in excess of \$500 million.

The District also provided massive construction support to the Air Force. In the late 1980s the decision was made to station the new B-2 Spirit stealth bomber at Whiteman Air Force Base. Facilities were quickly needed that could accommodate this unique aircraft, and by 1993 the first B-2 touched down at Whiteman. Able to refuel in mid-air, the aircraft is essential in the Nation's support of overseas conflicts.



*Construction of support
facilities at Whiteman
Air Force Base, 1993*

*A KC-135 Stratotanker
from the 22nd Air
Refueling Wing, McConnell
Air Force Base refuels a
B-2 Spirit from the 509th
Bomb Wing, Whiteman Air
Force Base (U.S. Air Force
photo by Senior Master
Sgt. Rose Reynolds)*





*Railroad bridge partly
washed out, 1993 flood*

Rebuilding Brush Creek



*Construction of Blue
Springs Lake picnic
area, 1985*

*Aerial view of Little Blue
River channel
modifications, 1989*



*After working through
many design challenges,
Truman Dam went
online with full reliable
power December 1, 1999*

In 1991 the District launched Partners for Environmental Progress, and committed to the restoration and preservation of over 48,000 acres of habitat that was lost due to prior bank stabilization and navigation work.

Tagging a least tern for tracking



Sampling shallow water habitat



Least tern feeding its young







Throughout the final decade of its first century and to this day, the Kansas City District continues to work collaboratively for river recovery. The Corps and the U.S. Fish and Wildlife Service (USFWS), in partnership with Tribal nations, states, and other agencies, worked together to develop and implement recovery actions under the umbrella of the Missouri River Recovery Program. The Program's foundation stands on four pillars: habitat creation, flow modifications, science and public involvement.

The USFWS developed a Biological Opinion to protect the three threatened and endangered species that depend on the Missouri River: the pallid sturgeon, least tern and piping plover. The District responded by developing a more substantial Missouri River Mitigation Project. This was accomplished by acquiring the land needed to develop fish and wildlife habitat from Sioux City, Iowa, to St. Louis, Mo. The Water Resources Development Act (WRDA) of 1999 increased the number of acres to be acquired through the Mitigation Project to a total of 285,400, almost half of which is located in Kansas and Missouri. In 2004, the District and the USFWS



Smithville Lake

Photo left: Wetlands provide habitat for fish and wildlife



1999
Union Station
renovation completed



2001
9/11
attacks



2003
Human genome
project complete



2005
Hurricane
Katrina

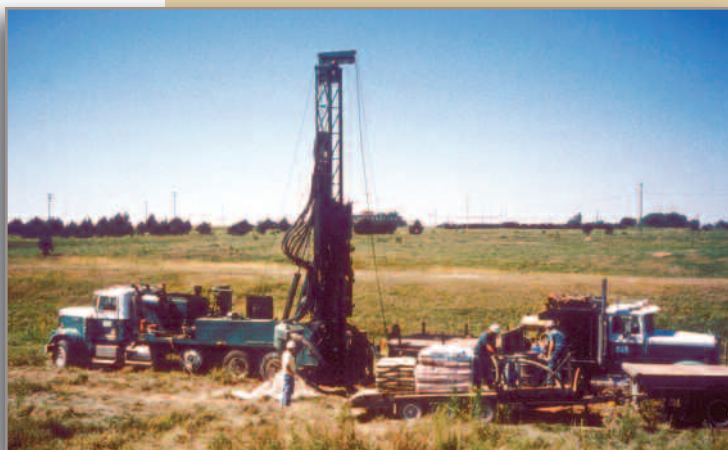


2007
Power and Light
Entertainment
District opens

announced the completion of construction of more than 1,200 acres of shallow water habitat for the pallid sturgeon. A total of 20,000 acres will be built along the entire length of the Missouri River by 2020.

After more than a decade of work on cleaning up hazardous waste sites, the District had proven itself a leader in this crucial mission. In 1998, the Kansas City District was called on to further assist in the cleanup of Cold War legacy wastes through the U.S. Department of Energy's Formerly Utilized Sites Remedial Action Program (FUSRAP). The program was created by Congress to remediate soils and buildings at multiple sites contaminated with radiological materials left over from their use in nuclear weapon production.

The District continued its cleanup responsibilities at other hazardous sites through the Heartland. Projects for the Kansas City District's Hazardous, Toxic and Radiological Waste Program (HTRW) for fiscal year 2000 were valued at \$183 million, with another \$15 million for its Defense Environmental Restoration Program (DERP) mission. The most significant DERP customer was Fort Riley, which was awarded the annual President's National Environmental Excellence Award in 2000. In the same year, the District



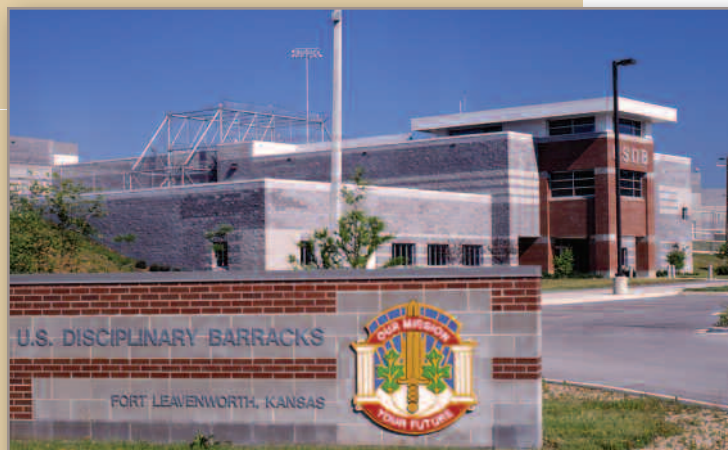
*Site cleanup at Blaine
Naval Ammunition
Depot, Hastings, NE*

*FUDS work at Blaine
continues into the night*



*FUSRAP site
remediation*

*Entrance to U.S.
Disciplinary Barracks,
Fort Leavenworth*



*Aerial view of USDB,
Fort Leavenworth*



*U.S. Pentagon,
Washington, D.C.,
September 11, 2001*



was also recognized with the Presidential Design Award for the work performed at the Blaine Naval Ammunition Depot FUDS site.

Amendments to BRAC brought additional military construction needs for Forbes Field Air Guard Station, McConnell Air Force Base, Fort Riley and Fort Leavenworth. The District also designed and built a new state-of-the-art, 515-bed U.S. Disciplinary Barracks (USDB) at Fort Leavenworth. The USDB is the only maximum-security correctional facility in the Department of Defense. It is the oldest penal institution in continuous operation in the federal system.

The District also provided support at home and overseas as Fort Riley began training Military Transition Teams with the mission to train, mentor and advise Iraqi and Afghani security forces. The Afghanistan Engineering District (AED) was established in Kabul, Afghanistan and the Gulf Region Division was established with three Districts (Tikrit, Tallil, and Baghdad).

On the home front, District personnel quickly responded with relief efforts for natural disasters such as hurricanes Katrina, Floyd, Wilma and Ike, as well as the 9/11 terrorist attacks on the World Trade Center in New York City in 2001.



The Kansas City District celebrated its 100th anniversary in 2007

Eagle Bluffs Mitigation Site



Using PONAR to grab samples of lake bottom material for analysis. The sampler is named after Great Lakes scientists, Charles E. Powers, Robert A. Ogle, Jr., Vincent E. Noble, John C. Ayers, and Andrew Robertson

Kansas City District provides personnel in support of the Global War on Terror



Doomed seedlings along the banks

*The District is responsible
for maintaining the trails
in recreational areas*



*Chris Witte with
paddlefish near
Boonville, MO*



*Another District
responsibility is performing
prescribed burns*



*World Trade Center relief
efforts, New York City,
September 11, 2001*



Water quality sampling





The pallid sturgeon can grow up to six feet in length and weigh up to 80 lbs.

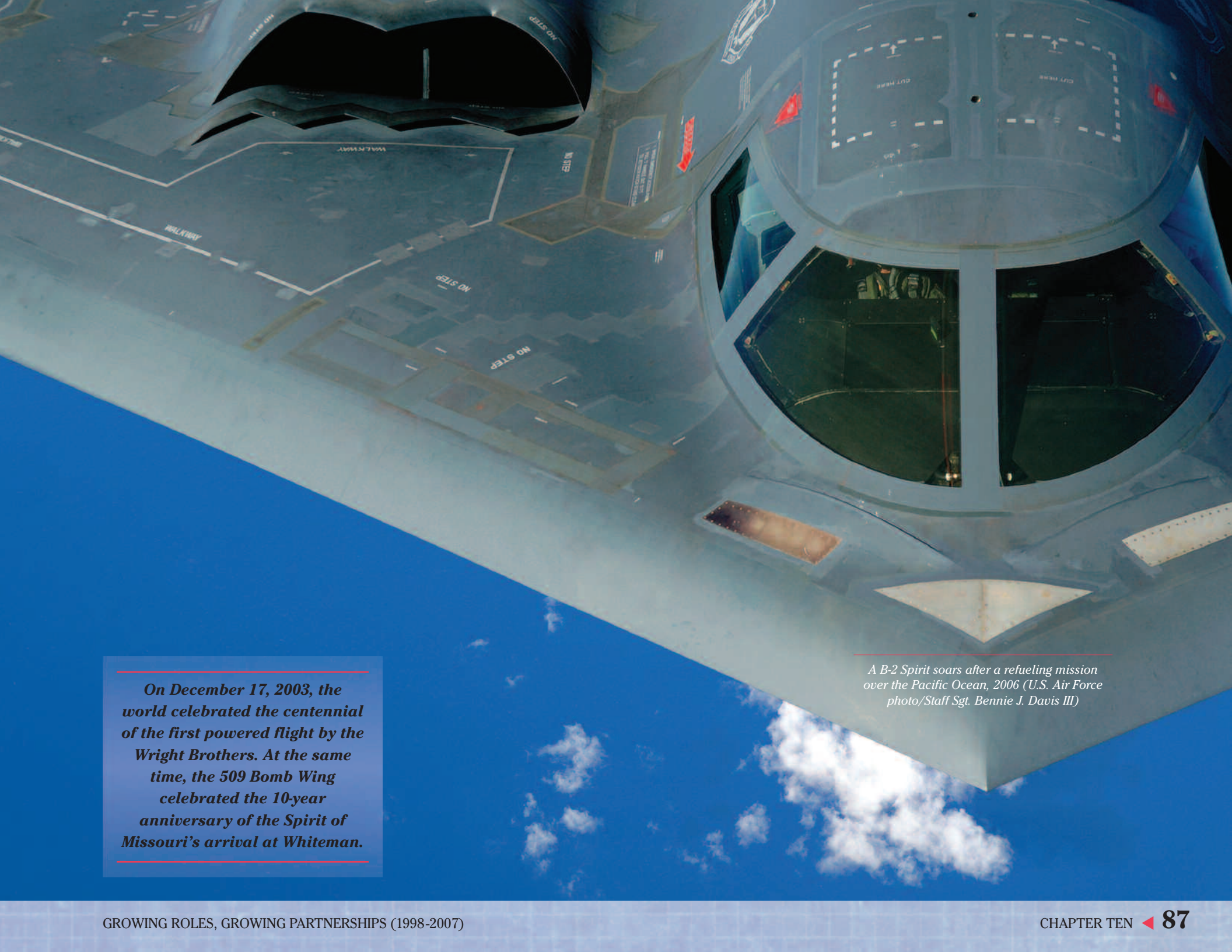
Decadent Cottonwood forest



It's important to preserve and restore the Cottonwood forests in the District because they provide habitat for a wide variety of birds, including American goldfinches, yellow warblers, Northern orioles, mourning doves, warbling vireos, woodpeckers, black-capped chickadees and occasionally even bald eagles.

*Bald eagle in flight
(Photo by Mike Watkins)*





On December 17, 2003, the world celebrated the centennial of the first powered flight by the Wright Brothers. At the same time, the 509 Bomb Wing celebrated the 10-year anniversary of the Spirit of Missouri's arrival at Whiteman.

A B-2 Spirit soars after a refueling mission over the Pacific Ocean, 2006 (U.S. Air Force photo/Staff Sgt. Bennie J. Davis III)





For over a century the U.S. Army Corps of Engineers Kansas City District has exemplified service to the Nation. The mission and values of the District are evident in every project, no matter the size. The men and women of the District continually prove themselves to be relevant, ready, responsible and reliable.

With its 18 dams and lakes, the Kansas City District provides the Heartland with water, power and recreation, while protecting families, farmland and businesses from flooding. As innovative and responsible stewards of the environment, the District works collaboratively with other organizations and agencies to restore and preserve fish and wildlife habitat along the waterways and wetlands within its jurisdiction. Environmental management and restoration also remains a top priority at former and current military sites. The District can quickly mobilize in times of natural disaster, offering relief and emergency management services.

Photo left: Lewis and Clark Command and General Staff College, Fort Leavenworth



A lone fisherman enjoys a peaceful sunset at a District lake



The Corps' historical strengths in program management, engineering design, research development and construction will prove invaluable as the District readies to meet new challenges and opportunities to strengthen the Nation's security, rebuild and rehabilitate the Nation's infrastructure and reduce risks from disasters.

The Kansas City District will continue to proudly serve the Armed Forces and the Nation in times of peace and war now and in the future.

*Early spring sunset on the
Missouri River near Hartsburg*





Sites, events and projects throughout the Kansas City District today





(Clockwise from top left)

*2008 Leadership Development Program
Retreat, Ft. Leonard Wood, MO*

*KCD park ranger on patrol at
Pomme De Terre*

KCD park ranger tagging an eagle

*KCD personnel confer on construction
project*





(Clockwise from top left)

Col. Wilson assumes command from Col. Rossi

KCD park ranger conducts water sampling

KCD park ranger promotes water safety

Ribbon cutting at Ft. Riley, KS



KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS PAST COMMANDERS



**MAJOR
EDWARD H.
SCHULZ**
1907-1912



**LT. COLONEL
HERBERT
DEAKYNE**
1912-1915



**COLONEL
C. Mc D.
TOWNSEND**
1916



**LT. COLONEL
J. F. McINDOE**
1916-1917

**BRIGADIER
GENERAL
WILLIAM H.
BIXBY**
1917



**COLONEL
WILLARD
YOUNG**
1917-1919



**MAJOR
R.T. WARD**
1920



**MAJOR
GILBERT VAN
B. WILKES**
1920-1924



**MAJOR
CLEVELAND C.
GEE**
1924-1927



**MAJOR
GORDON R.
YOUNG**
1927-1930



**CAPTAIN
THEODORE
WYMAN JR.**
1930-1934



**CAPTAIN
O.E. WALSH**
1934-35

**CAPTAIN
J.M. YOUNG**
1935-1936



**LT. COLONEL
P.A. HODGSON**
1936-1938



**COLONEL
A.M. NEILSON**
1938-1942



**COLONEL
FRANCIS H.
OXX**
1942





KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS PAST COMMANDERS



**COLONEL
R. SELEE**
1942-1943



**COLONEL
R.E.M. DES
ISLETS**
1943-1944



**LT. COLONEL
S.G. NEFF**
1944-1945



**COLONEL
W.E. POTTER**
1945-1948



**COLONEL
P.D. BERRIGAN**
1948-1950



**COLONEL
L.J. LINCOLN**
1950-1953



**COLONEL
KEITH R.
BARNEY**
1953-1955



**COLONEL
EARNEST C.
ADAMS**
1955-1957



**COLONEL
LAWRENCE E.
LAURION**
1957-1960



**COLONEL
ANDREW P.
ROLLINS JR.**
1960-1963



**COLONEL
MILES L.
WACHENDORF**
1963-1966



**COLONEL
WILLIAM G.
KRATZ**
1966-1969



**COLONEL
REUBEN L.
ANDERSON JR.**
1969-1971



**COLONEL
WILLIAM R.
NEEDHAM**
1971-1975



**COLONEL
RICHARD L.
CURL**
1975-1978



**COLONEL
WALTER C.
BELL**
1978-1981

KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS PAST COMMANDERS



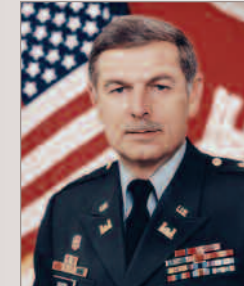
**COLONEL
GURNIE C.
GUNTER**
1981-1984



**COLONEL
ROBERT M.
AMRINE**
1984-1987



**COLONEL
JOHN H.
ATKINSON**
1987-1990



**COLONEL
WILBUR H.
BOUTIN JR.**
1990-1993



**COLONEL
RICHARD H.
GORING**
1993-1995



**COLONEL
ROBERT E.
MORRIS**
1995-1998



**COLONEL
GEORGE H.
HAZEL**
1998-2001



**COLONEL
DONALD R.
CURTIS JR.**
2001-2004



**COLONEL
MICHAEL A.
ROSSI**
2003-2007



**COLONEL
ROGER A.
WILSON, JR.**
2007-2010



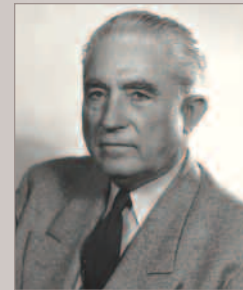
KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS DISTINGUISHED CIVILIANS



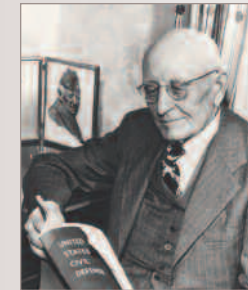
GEORGE C. HAYDON
PRINCIPAL
ENGINEER
1909 to 1933



ALBERT O. ROWSE
CIVIL ENGINEER
1911 to 1930



LAFE S. HOWARD
SUPERINTENDENT
GASCONADE
BOATYARD
1913 to 1958



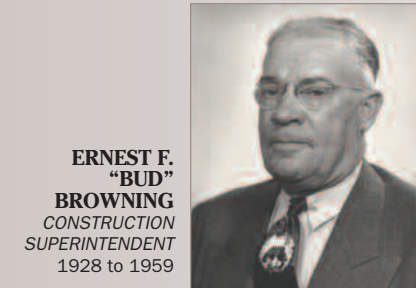
DELBERT A. "POP" GIBBS
ASSOCIATE CIVIL
ENGINEER
1916 to 1946



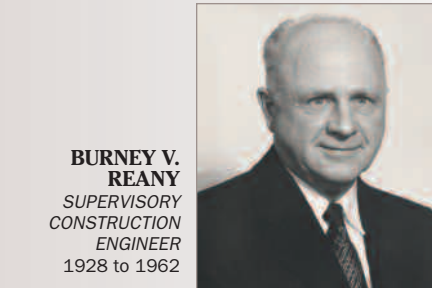
JOHN F. McINTYRE
MASTER,
TOWBOAT
SERGEANT FLOYD
1918 to 1968



HARRY C. POOLE
JUNIOR
ACCOUNTANT
1924-1934



ERNEST F. "BUD" BROWNING
CONSTRUCTION
SUPERINTENDENT
1928 to 1959



BURNEY V. REANY
SUPERVISORY
CONSTRUCTION
ENGINEER
1928 to 1962



MEREDITH "JUMBO" BROYLES
SUPERVISORY
CIVIL ENGINEER /
CHIEF
CONSTRUCTION
DIVISION
1928 to 1969



DONALD H. McCOSKEY
CIVIL ENGINEER /
CHIEF,
ENGINEERING
DIVISION
1929 to 1950



CECIL R. "OLD GRIFF" GRIFFITH
MARINE
INFORMATION
SPECIALIST
1929 to 1965



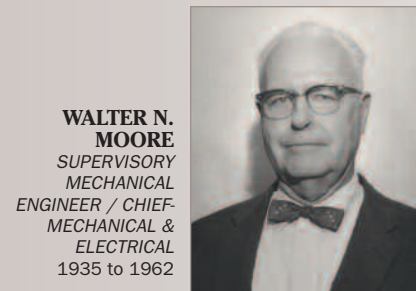
MARSHALL E. HOY
FINANCIAL
MANAGER
1929 to 1972



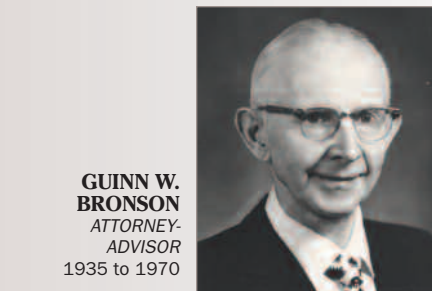
WILLIAM E. "CAP" SUMMERLIN
MASTER, PIPELINE
DREDGE WILLIAM
BLACK
1931 to 1959



HAZEL L. LUCKOW
MAIL & FILE
SUPERVISOR
1933 to 1969



WALTER N. MOORE
SUPERVISORY
MECHANICAL
ENGINEER / CHIEF-
MECHANICAL &
ELECTRICAL
1935 to 1962



GUINN W. BRONSON
ATTORNEY-
ADVISOR
1935 to 1970



KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS DISTINGUISHED CIVILIANS



LOUIS G. FEIL
SUPERVISORY
CIVIL ENGINEER /
CHIEF,
ENGINEERING
DIVISION
1939 to 1966



**MORTIMER M.
"MIKE"
TURNER, JR.**
SUPERVISORY
CIVIL ENGINEER /
CHIEF,
ENGINEERING
DIVISION
1939 to 1971



**JOHN M.
McCANN**
SUPERVISORY
CIVIL
ENGINEER/CHIEF,
LOCAL
PROTECTION
SECTION
1943 to 1965



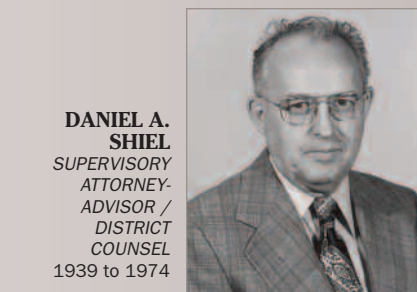
**REESE M.
MILLER**
LABOR RELATIONS
OFFICER
1931 to 1968



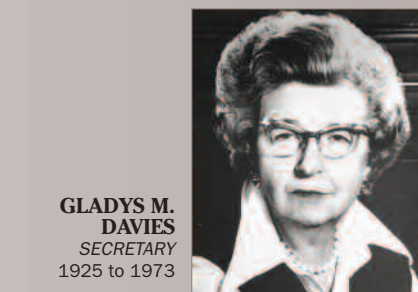
**OSCAR E.
PETTIJOHN**
REALTY OFFICER /
CHIEF, REAL
ESTATE DIVISION
1936 to 1972



**WILLIAM N.
(BILL) DOYLE**
ADMINISTRATIVE
OFFICER
1937 to 1973



**DANIEL A.
SHIEL**
SUPERVISORY
ATTORNEY-
ADVISOR /
DISTRICT
COUNSEL
1939 to 1974



**GLADYS M.
DAVIES**
SECRETARY
1925 to 1973



**DONALD D.
POOLE**
SUPERVISORY
NATURAL
RESOURCES
MANAGER
1948 to 1976



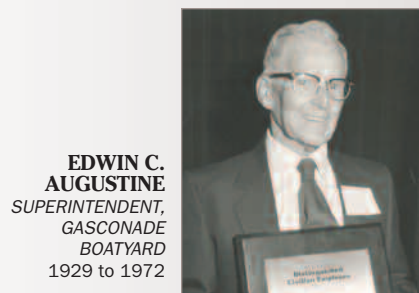
**WALTER R.
WYATT**
SUPERVISORY
CIVIL ENGINEER
1936 to 1976



**MYRL E.
MADDOX**
LABOR RELATIONS
OFFICER
1937 to 1974



**JOHN W.
MANNING**
CHIEF, DESIGN
BRANCH
1938 to 1976



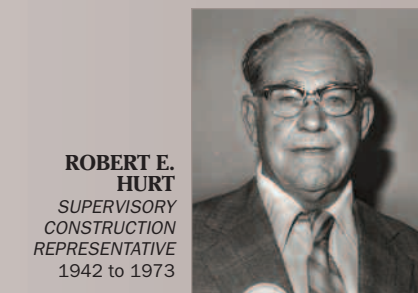
**EDWIN C.
AUGUSTINE**
SUPERINTENDENT,
GASCONADE
BOATYARD
1929 to 1972



ROYAL T. TATE
MASTER, PIPELINE
DREDGE
1930 to 1972



**JACOB F.
REDLINGER**
CHIEF,
FOUNDATIONS AND
MATERIALS
BRANCH
1957 to 1969



**ROBERT E.
HURT**
SUPERVISORY
CONSTRUCTION
REPRESENTATIVE
1942 to 1973

KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS DISTINGUISHED CIVILIANS



DONALD L. FRITTS
ASSISTANT CHIEF
ENGINEERING
DIVISION
1954 to 1984



DENNIS H. BROWN
SUPERVISORY
ELECTRONICS
TECHNICIAN
1942 to 1977



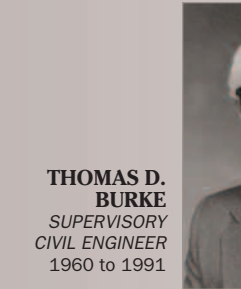
WILLIAM H. FRAZIER
PARK MANAGER
1952 to 1973



BERNARD E. (GENE) UPSCHULTE
CHIEF, REAL
ESTATE DIVISION
1973 to 1985



MARION M. HARTER
SUPERVISORY
STRUCTURAL
ENGINEER
1949 to 1981



THOMAS D. BURKE
SUPERVISORY
CIVIL ENGINEER
1960 to 1991



PHILIP L. ROTERT
CHIEF,
PLANNING
DIVISION
1959 to 1991



BARBARA J. LEWIS
INFORMATION
SUPPORT
MANAGER
1956 to 1992



JEANNE M. PARKER
ADMINISTRATIVE
OFFICER
1942 to 1990



PAUL D. BARBER
CHIEF,
ENGINEERING
DIVISION
1957 to 1992



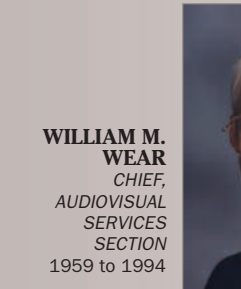
JOAN R. CHAPMAN
CONTRACTING
DIVISION
1962 to 1994



JOHN P. ELMORE
CHIEF,
OPERATIONS
DIVISION
1962 to 1987



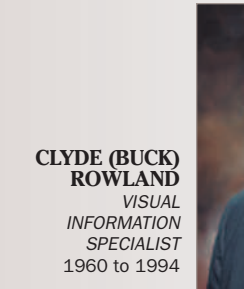
GLEN E. DAVIS
CHIEF,
CONSTRUCTION
OPERATIONS
DIVISION
1954 to 1996



WILLIAM M. WEAR
CHIEF,
AUDIOVISUAL
SERVICES
SECTION
1959 to 1994



JOHN E. MOYLAN
CHIEF,
GEOTECHNICAL
BRANCH
1958 to 1991



CLYDE (BUCK) ROWLAND
VISUAL
INFORMATION
SPECIALIST
1960 to 1994





KANSAS CITY DISTRICT ARMY CORPS OF ENGINEERS DISTINGUISHED CIVILIANS



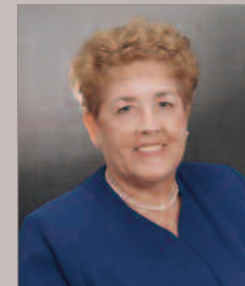
ROY D. REED
CHIEF, DEPUTY
DISTRICT
ENGINEER FOR
PROJECT
MANAGEMENT
AND CHIEF OF
PROGRAMS &
PROJECT
MANAGEMENT
1960 to 1996



**WOODS C.
HIGHT**
EQUAL
EMPLOYMENT
OPPORTUNITY
OFFICER
1951 to 1977



**WAYNE H.
COOK**
PROGRAMS AND
PROJECT
MANAGEMENT
DIVISION
1959 to 1996



**HELEN V.
BERETTA**
CHIEF, TECHNICAL
SERVICES BRANCH
1957 to 1997

**MERLE L.
BRADEN, PE,
CVS**
VALUE
ENGINEERING
OFFICER
1961 to 1994



**DONALD N.
JOHNSON**
CHIEF,
SPECIFICATIONS
SECTION
1959 to 1997



**BYRON
BIRCHER**
CHIEF, DESIGN
BRANCH
1960 to 1998



**LANA J.
COFFMAN**
PROGRAM
ANALYST,
OPERATIONS
DIVISION
1963 to 2001



**WESLEY G.
ADAMS**
DEPUTY CHIEF,
OPERATIONS
DIVISION, CHIEF,
TECHNICAL
SUPPORT BRANCH
1969 to 2002



**JAMES O.
EDMONDS**
CIVIL
ENGINEERING
TECHNICIAN
1960 to 1992



**JANIE CHOICE
CAVITT**
DEPUTY DISTRICT
COUNSEL
1978 to 2003



MEL JEWETT
CHIEF,
REGULATORY
BRANCH
OPERATIONS
DIVISION
1951 to 1995

**GERALD W.
ADAMS**
CHIEF,
EMERGENCY
MANAGEMENT,
DISTRICT
EXECUTIVE
OFFICER
1966 to 2002



DAVID L. DAY
CHIEF, HTRW
BRANCH, CHIEF,
CIVIL WORKS
BRANCH
1969 to 2005



**LAWRENCE M.
CAVIN**
CHIEF,
REGULATORY
BRANCH, CHIEF,
ENFORCEMENT
SECTION
1973 to 2002

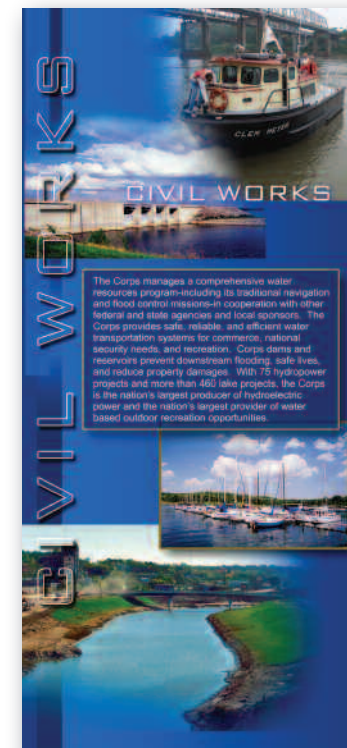


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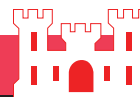


KANSAS CITY DISTRICT RESERVOIR PROJECTS

Lake Project	Year Authorized	Year Impounded
IOWA		
Rathbun	1954	1969
KANSAS		
Clinton	1962	1977
Hillsdale	1954	1982
Kanopolis	1938	1948
Melvern	1954	1975
Milford	1954	1967
Perry	1954	1969
Pomona	1954	1965
Tuttle Creek	1938	1959
Wilson	1944	1964
MISSOURI		
Blue Springs	1968	1988
Harry S. Truman	1954	1979
Long Branch	1965	1978
Longview	1968	1985
Pomme de Terre	1938	1961
Smithville	1965	1979
Stockton	1954	1969
NEBRASKA		
Harlan County	1938	1952



*The project lists included on the appendices are the most up-to-date information available at time of publication.
The information listed is correct to the best of the company's knowledge.*



FLOOD CONTROL PROJECT

LOCATION

Significant Flood Works Features LV: Levee, CH: Channel, FW: Floodwall, IW: IWall, PP: Pump Plant, RG: Rolling Gate, GCS: Grade Control

MISSOURI RIVER LEVEE SYSTEM

R 512-513
Kimsey-Holly
R-500
L-497
L-488
R-482
Mo-Mill Creek: LV
R 471-460
L-455
L 448-443
R-440
L-408
L-400
Liberty Bend
R-35I, Section 1
R-35I, Section II
L-246
Lower Chariton
New Haven

Drainage District #7
CannonDD
Iowa Point DD #4
Forest City, MO
Holt County DD #7
Doniphan-Burr Oak DD #3
Amazonia LD
Elwood-Gladden DD
South St. Joseph DD
Halls Levee District
DD #15-45
Farley-Beerly DD
Waldron LD
Highway 291 MO Corps Mnt
Atherton LD, MO
Atherton-Blue Mills LD, MO
Brunswick-Dalton DD, MO
Lower Chariton DD, MO
New Haven DD, MO

MO-Nemaha-KS: LV/RW
Kimsey-Holly: LV/PP
MO: LV
MO- Tieback: LV/PP
MO-Mill Creek: LV
MO: LV
MO-Mace-Dillon: LV / PP
MO-Peter's Crk: LV / RW
MO-Contrary Crk: LV/PP/RW
MO-Contrary: LV
MO- Independence Crk: LV/PP
MO-Platte-Bee Crk: LV
MO-Platte: LV/RW
MO: LV
MO - Little Blue: LV
Little Blue: LV/CH
MO-Grand-Chariton: LV/RW
MO-Lower Chariton - Chariton: LV
MO: LV

KANSAS CITY UNITS

Birmingham
NKC,DTA
East Bottoms
CID Missouri
NKC, Lower Section
Argentine
Armourdale
CID Kansas
Upper Fairfax
L-385

Birmingham DD
City of Kansas City
City of Kansas City
City of Kansas City
NKCLD
Kaw Valley DD
Kaw Valley DD
Kaw Valley DD
Fairfax DD
City of Riverside

MO-Shoal: LV/PP/RG
MO: LV/FW/PP
MO - Blue: LV/FW/PP/RW
MO: FW/PP
MO-Rock Crk: LV/PP/RW?
KS: LV/FWIPP
KS: LV/FW/PP/RW
KS-MO: LV/FW/PP/RW
MO: LV/FW/PP/RW
MO: LV/PP/RG

TOPEKA UNITS

Soldier Creek
North Topeka Levee
Waterworks
Auburndale
South Topeka Levee
Oakland

North Topeka DD
North Topeka DD
City of Topeka, KS
City of Topeka
City of Topeka
City of Topeka

Soldier Creek: LV/CH
KS: LV/CH/PP
KS: LV/FW/RW
KS: LV/PP/RW
KS: LV/FW/PP/RW
KS-Shunganunga: LV/FW/CH/PP/RW



KANSAS CITY DISTRICT LOCAL PROTECTION PROJECTS

FLOOD CONTROL PROJECT

LOCATION

Significant Flood Works Features LV: Levee, CH: Channel, FW: Floodwall, IW: IWall, PP: Pump Plant, RG: Rolling Gate, GCS: Grade Control

NON-MISSOURI RIVER PROJECTS

Abilene
Atchison
Bannister Federal Complex
Barnard Levee
Bartley Levee
Bedford
Blue River Channel
Brush Creek Channel
Chariton Shoal Creek
Chariton Macon-Adair
Chariton Reinhardt Ranch
Clyde Levee
Fairbury Levee
Frankfort Levee
Gypsum Levee
Indianola Levee
Lawrence Levee
Little Blue River
Manhattan
Marysville Levee
Osawatomie
Ottawa
Salina
Seward
Stranger Creek
Stonehouse Creek

City of Abilene, KS
City of Atchison, KS
GSA
City of Barnard, KS
City of Barkley, NE
City of Bedford, IA
City of Kansas City, MO
City of Kansas City, MO
Shoal Creek DD
Chariton River DD
Worthington DD
City of Clyde, KS
City of Fairbury, NE
City of Frankfort, KS
City of Gypsum, KS
City of Indianola, NE
City of Lawrence, KS
Jackson Co. MO Parks & Rec.
City of Manhattan, KS
Marysville, KS
City of Osawatomie, KS
City of Ottawa, KS
City of Salina, KS
City of Seward, NE
Big Stranger Creek DD, KS
Stonehouse Creek DD # I, KS

Mud Creek/CH
Conduit/CH
Blue River-Indian Crk: LV/FW/IW/RG
Solomon-Rattlesnake: LV
Dry Creek: LV/CH
North 101 River: CH/GCS
Blue River: FW/CH/GCS
Brush Creek: CH
Shoal Creek: CH (2 mi)
Chariton: CH (17 mi)
Chariton: CH
Elk Creek: LV/CH
Little Blue: LV
Black Vermillion: LV
Gypsum Creek: LV/CH
Republican: LV
KS-Mud Creek: LV/CH/PP
Little Blue: CH
KS - Blue River: LV/PP/RW
Republican
Marais des Cygnes & Pottawatomie: LV/PP
Marais des Cygnes: LV/FW/PP/RG
Smoky Hill, Dry, Mulberry: RW/LV/PP
Big Blue: LV/PP
Stranger: CH
Stonehouse: LV/CH

MILITARY INSTALLATIONS

Sherman Airfield
Funston Unit
Marshall Field Unit
Forsyth Unit
Lake City Levee

Ft. Leavenworth DPW, KS
Ft. Riley DPW, KS
Ft. Riley DPW, KS
Ft. Riley DPW, KS
Lake City Army Ammunition Plant, MO

MO: LV/PP
KS: LV
KS: LV
Republican: LV
Little Blue: LV/CH

KANSAS CITY DISTRICT BENDS ON THE MISSOURI RIVER



LOCATION	Begins	Ends
Amazon Bend	0	3.4
Cora Island Bend	3.4	6
Bellefontaine Bend	6	9.2
Brickhouse Bend	9.2	11
Pelican Bend	11	16.7
Mullanphy Bend	16.7	21.9
Cui De Sac Bend	21.9	25.3
St. Charles Bends	25.3	28.2
Creve Coeur Bend	28.2	31.9
Springhouse Bend	31.9	33.9
Howard Bend	33.9	37.7
Bonhomme Bend	37.7	40.7
Weldon Springs Bend	40.7	43.7
Monarch Bend	43.7	45.5
Doziers Bend	45.5	48.6
Centaur Bends	48.6	51.2
St. Albans Bend	51.2	54.4
Augusta Bend	54.4	56.7
Hinkles Bend	56.7	60.6
Boles Bend	60.6	64.8
South Point Bend	64.8	67
Washington Bend	67	69.6
Marthasville Bend	69.6	74.6
Dundee Bends	74.6	78.2
New Haven Bends	78.2	82.7
Pinckney Bend	82.7	85.3
Berheimer Bends	85.3	89.7
Berger Bend	89.7	91.8
Bates Island Bend	91.8	93.9
Hermann Bend	93.9	97.9
McGirks Island Reach	97.9	103.4
Bluffton Bend	101.8	110.2
Gasconade River Bend	103.4	105.1
Straubs Bends	105.1	107.8
Morrison Bend	110.2	112.6
Portland Bend	112.6	116
Chamois Bend	116	118.4
Auxvasse Bends	118.4	122.3

LOCATION	Begins	Ends
St. Aubert Bend	122.3	125
Isbell Bends	125	128.7
Osage River Bend	128.7	130.2
Cote Sans Dessein Bend	130.2	132.8
Rising Creek Bends	132.8	142
Jefferson City Reach	142	145.9
Murrays Bend	145.9	149.8
Stanley Bend	149.8	151.8
Burlington Bend	151.8	155.2
Marion Bend	155.2	158.7
Eureka Bend	158.7	162.2
Sandy Hook Bend	162.2	166.8
Providence Bend	166.8	171.3
PlowBoy Bend	171.3	174.5
Lupus Bend	174.5	176.6
McBaine Bend	176.6	178.3
Searcys Bend	178.3	180.2
Rochepoint Bends	180.2	187.2
Diana Bends	187.2	192.1
Franklin Island Reach	192.1	193.8
Franklin Bend	193.8	197
Boonville Bends	197	201.2
Lamine River Bend	201.2	203.6
Slaughterhouse Bend	203.6	205.8
Robinson Bends	205.8	208.9
Arrow Rock Bend	208.9	211.2
Salt Creek Bend	211.2	213.8
Saline City Bend	213.8	217.5
Euphrase Bend	217.5	220
Fish Creek Bend	220	222.3
Glasgow Bend	222.3	228.2
Cambridge Bend	228.2	232.2
Wilhoite Bend	232.2	234.3
Gilliam Bend	234.3	237
Little Missouri Bend	237	239.5
Bushwacker Bend	239.5	246
Grand River Bend	246	250.2
Brunswick Bend	250.2	253.1



KANSAS CITY DISTRICT BENDS ON THE MISSOURI RIVER

LOCATION	Begins	Ends
DeWitt Bend	253.1	257.2
Miami Bend, Lower	257.2	259.8
Miami Bend, Middle	259.8	261.2
Miami Bend, Upper	261.2	263.4
Thomas Bend	263.4	265.8
Teteseau Bend	265	266.9
Prunty Bend	266.9	271.8
Malta Bends	271.8	275.4
Tamerlane Bend	275.4	279.7
Hills Bend	279.7	282.1
Cranberry Bend	282.1	284.4
Bakers Bend	284.4	289.9
Waverly Bend	289.9	296.4
Moberly Bend	296.4	299.5
Hodge Bend	299.5	301.2
Baltimore Bend	301.2	304.4
Berlin Bend	304.4	306.9
Tabo Bend	306.9	309.2
Sheepnose Bend	309.2	311.2
Lexington Bend	311.2	317.7
Bootlegger Bend	317.7	319.4
Sni Bends	319.4	323.5
Camden Bend	323.5	326.8
Napoleon Bend	326.8	332.1
Fishing River Bend	332.1	335
Sibley Bend	335	336.9
Jackass Bend	336.9	339
Little Blue Bend	339	340.5
Cooley Lake Bend	340.5	342.4
Missouri City Bends	342.4	346.5
Jacksons Bend	346.5	351.2
Liberty Bend	351.2	353.9
Big Blue River	353.9	358.6
Randolph Bend	358.6	363.8
Kansas City Reach	363.8	366.3
Kansas River Bend	366.3	368.4
Kaw Bend	368.4	372.1
Quindaro Bend	372.1	375.2

LOCATION	Begins	Ends
Parkville Bend	375.2	378.3
Pomeroy Bend	378.3	383
Weavers Bend	383	385.1
Pope Bend	385.1	388.4
Delaware Bend	388.4	392.6
Leavenworth Bend	392.6	396.7
Leavenworth Reach	396.7	398.4
Fort Bend	398.4	400.2
Weston Bend	400.2	403.9
Kickapoo Bend	403.9	406.9
Iatan Bend, Lower	406.9	408.3
Iatan Bend, Middle	408.3	409.7
Iatan Bend, Upper	409.7	412.5
Oak Mills Bend	412.5	415.8
Bean Lake Bend	415.8	417.9
Atchison Bend	417.9	425.1
Rushville Bend	425.1	428.8
Doniphan Bend	428.8	431.4
Geary Bends	431.4	435
Kenmoor Bend	435	438.6
Palermo Bend	438.6	442.6
St. Joseph Bend	442.6	449.5
Bon Ton Bend	449.5	451.8
Amazonia Bend	451.8	454.8
Burr Oak Bend	454.8	458.9
Mill Creek Bend	458.9	462.9
Dallas Bends	462.9	466.9
Charleston Bend	466.9	468.9
Mt. Vernon Bends	468.9	472.5
Forbes Bends	472.5	477.6
Wolf Creek Bend	477.6	480.5
Tarkio Bend	480.5	483.2
Iowa Point Bend	483.2	485.7
White Cloud Bends	485.7	489.4
Squaw Bend	489.4	491.1
Nemaha Bends	491.1	494.1
Rulo Bend	494.1	498.4

KANSAS CITY DISTRICT MILITARY INSTALLATIONS



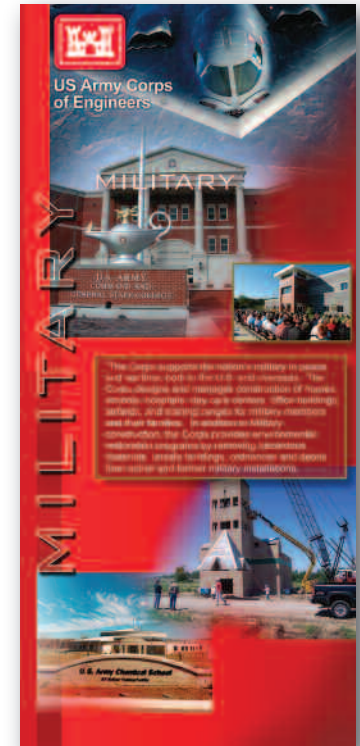
Name of Facility	Location
	Missouri
Camp Crowder	Neosho
Missouri Ordinance Works	Pike County
Malden Army Air Field (Maulsby Auxiliary Field #2)	Maulsby
St. Louis Ordinance Plant	St. Louis
St. Louis Ordinance Plant (McQuay-Norris Parking area)	St. Louis
St. Louis Administration Center	St. Louis
Anderson Air Activities	McBride
St. Charles Rifle Range (Missouri National Guard Range)	St. Charles
Weingarten POW Camp	Weingarten
Ford Motor Company	Kansas City
Pratt and Whitney Aircraft Corp. of Missouri	Kansas City
Aluminum Company of America	Kansas City
Missouri Shipbuilding Corp & St. Louis Shipbuilding & Steel Co.	St. Louis
Weldon Springs Ordinance Works	Weldon Springs
Rosencrans Army Air Field	St. Joseph
St. Louis Smelting and Refining Co.	Fredericktown
Lambert Field (Curtis-Wright Technical Training School)	St. Louis
Camp Clark POW Camp	Nevada
Sedalia Army Air Field (Vichy Army Air Field, Outlying Field)	Sedalia
Malden Army Air Field	Malden
Richards - Gebaur Air Force Base	Grandview
St. Louis Naval Air Station	St. Louis
Malden Army Air Field (Dexter Aux. Field #1)	Dexter
Malden Army Air Field (Risco Aux. Field #3)	Risco
Malden Army Air Field (Gideon Aux. Field #4)	Gideon
Malden Army Air Field (Campbell Aux. Field #6)	Campbell
Jefferson Barracks	St. Louis
Ozarks Ore Co.	Ironton
Missouri Institute of Aeronautics	Sikeston
Kansas City Public Service Co.	Kansas City
Ft. Leonard Wood	St. Robert
Cape Institute of Aeronautics	Cape Girardeau
American Can Company	St. Louis
Blytheville Army Air Field Hornersville Aux. A-1	Honersville
Blytheville Army Air Field Cooter Aux. #4	Cooter.
Blytheville Army Air Field Steele Aux. Field #1	Steele, Co.

Name of Facility	Location
	Missouri
McDonnell Aircraft Corp. Lambert Field (Formerly Curtis-Wright Corp)	St. Louis
National Distillers Product Corp.	Kansas City
Whiteman Air Force Base	Knob Noster
St. Louis Disposal Center #2 (Harvey Parks Airport)	Sikeston
St. Louis Ordinance Sub-Depot	St. Louis
Springfield National Cemetery	Springfield
	Kansas
Jayhawk Ordinance Works	near Galena
Kansas Ordinance Plant	Parsons
Camp Phillips	Smolan
Coffeyville Army Airfield (Auxiliary field #1)	Coffeyville
Coffeyville Army Airfield (Auxiliary field #2)	Coffeyville
Coffeyville Army Airfield (Auxiliary field #4)	Coffeyville
Strother Field (Auxiliary field #1)	Cowley Co.
Strother Field (Auxiliary field #2)	Cowley Co.
Olathe Naval Air Station (Gardner CAA Intermediate Landing Field)	Gardner
Kansas City Modification Center #4	Kansas City
Boeing Airplane Co. Plant #2	Wichita
Independence Army Airfield (Auxiliary Field #4)	Independence
Independence Army Airfield (Auxiliary Field #7)	Independence
Concordia POW Camp	Concordia
Independence Army Airfield (Auxiliary Field #3)	Independence
Independence Army Airfield (Cherryvale Auxiliary Field #9)	Independence
Garden City AAF (Auxiliary Field #1)	Gray Co.
Garden City AAF (Auxiliary Field #2)	Gray Co.
Strother Army Airfield (Arkansas City-Winfield Airport)	Crowley Co.
Beech Aircraft Corp.	Wichita
Lee Rubber and Tire Corp.	Kansas City
Fairfax Field (Adjacent to Aircraft Assembly Plant)	Kansas City
Strother Field (Auxiliary field #5)	Arkansas City
Hutchinson Municipal Airport (HNAS, Auxiliary Field #1)	Hutchinson
Cooperative Refinery Assoc.	Coffeyville
Coffeyville Army Airfield	Coffeyville



KANSAS CITY DISTRICT MILITARY INSTALLATIONS

Name of Facility	Location
Wichita Municipal Airport	Kansas Wichita
Pratt Army Airfield	Pratt
Liberal Army Airfield	Liberal
Walker Field-Smoky Hill Air to Air Gunnery Range	Gove Co.
Liberal Army Airfield (Aux. AAF #3)	Garden City
Great Bend Army Airfield	Barton Co.
Camp Phillips (Salina Engr. Redistribution Center (Area M. Whse. Sec))	Salina
Kansas City Aircraft ASS. Plant #2	Kansas City
Walker Army Airfield	Victoria
Dodge City Army Airfield Jetmore Auxiliary Field #4)	Jetmore
Dodge City Army Airfield	Dodge City
Herington Army Airfield	Delavan
Midwest Solvents Co., Inc. (Plant sight of lessee) and Winthrop, MO. Plant 1312	Atchison
Goodyear Tire and Rubber Co. Plant 2217	Topeka
Garden City Army Airfield	Garden City
Ft. Riley	Manhattan
Eagle-Picher Mining and Smelting Co. (Paxon Operations)	Cherokee Co.
Independence AAF	Montgomery
Kansas City Disp. Center #2 (Fairfax Whse)	Kansas City
Hutchinson HF/DF Station	Hutchinson
Hutchinson Naval Air Station	Hutchinson
Wirt Field	Newton
Forbes Air Force Base	Topeka
Schilling Air Force Base	Salina
McConnell Air Force Base	Wichita

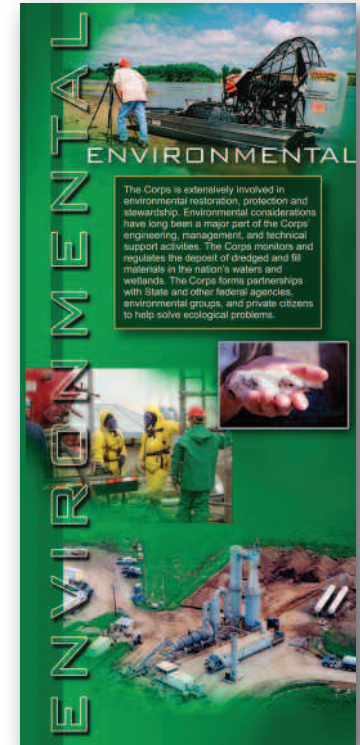




1. 57TH AND N. BROADWAY, KS SUPERFUND SITE, FIVE YEAR REVIEW
2. ALCOA, NY SUPERFUND - PRP OVERSIGHT FOR RD
3. ASTORIA AIRPORT: UST
4. ASTORIA LOW LEVEL BOMBING RANGE: PA/INPR
5. ATCHISON CAVES LTM FOR FY05, 89TH RRC
6. ATLANTIC RESOURCES, NJ REMEDIAL DESIGN OVERSIGHT ACTIVITIES
7. BAKER AFS: UST
8. BASIN MINING, MT SUPERFUND SITE - FIVE YEAR REVIEW
9. BEAVER ARMY TERMINAL: POSS CONTAM WATER
10. BERRY CREEK, NJ SUPERFUND SITE - TECHNICAL ASSISTANCE RI/FS
11. BLAINE NAVAL AMMUNITION DEPOT: OU 15
12. BOG CREEK (OU2), NJ SUPERFUND SITE REMEDIAL DESIGN
13. BOG CREEK FARM, NJ FOCUSED FEASIBILITY STUDY
14. BOISE ARMY BARRACKS
15. BREWSTER WELLFIELD, NY SUPERFUND SITE - GROUNDWATER TREATMENT SYSTEM O&M
16. BROWNFIELDS - GRANT REVIEW ORIENTATION/COORDINATION
17. BROWNFIELDS SUPPORT TO THE CITY OF KANSAS CITY
18. BRUNEAU PRECISION BOMBING RANGE #2: ASR
19. BRUNO, NE SUPERFUND SITE TECHNICAL ASSISTANCE FEASIBILITY STUDY
20. BURNS AFSTA: SEVERAL UST'S
21. CALDWELL TRUCKING, NJ SUPERFUND SITE, OTHER TECHNICAL ASSISTANCE
22. CAMP PHILLIPS: PA/INPR
23. CAMP WHITE: PA/INPR
24. CAMPBELL AUX FLD #6: PA/INPR
25. CERRILLOS MINING DISTRICT, NM SUPERFUND - RA
26. CHEMICAL INSECTICIDE, NJ SUPERFUND SITE REMEDIAL DESIGN
27. CHEMICAL LEAMAN, NJ SUPERFUND SITE, TECHNICAL ASSISTANCE RI/FS
28. CHEMSOL, INC., NJ SUPERFUND-TECHNICAL ASSISTANCE FOR RA
29. CHEROKEE COUNTY, KS SUPERFUND, HAZ WASTE ENFORCEMENT SUPPORT
30. COASTAL RADIATION, LA SUPERFUND - NORM WASTE DISPOSAL
31. COFFEYVILLE AAF: ordnance project
32. COFFEYVILLE AUX FLD #4: PA/INPR
33. CONCORDIA POW CAMP: PA/INPR
34. CORNELL DUBILIER, NJ SUPERFUND SITE REMEDIAL DESIGN
35. CORVALLIS AAF: GW/SOIL CONTAMINATION
36. CPS/MADISON INDUSTRIES (OU2), NJ SUPERFUND SITE, RI/FS OVERSITE
37. DEXTER AUX FLD #1: PA/INPR
38. DIAMOND ALKALI, NJ SUPERFUND SITE TECHNICAL ASSISTANCE RI/FS
39. DIAMOND HEAD OIL REFINERY, NJ SUPERFUND SITE TECHNICAL ASSISTANCE RI/FS
40. DODGE CITY AAF: ASR COMPLETE
41. DOVER MUNICIPAL WELL, NJ SUPERFUND SITE TECHNICAL ASSISTANCE RI/FS
42. DUPONT NECCO PARK, NY SUPERFUND - PRP OVERSIGHT FOR RA
43. EAGLE MINE, CO SUPERFUND SITE, 5-YEAR REVIEW
44. EMMELLS SEPTIC LANDFILL, NJ SUPERFUND SITE REMEDIAL DESIGN
45. EPHRATA AF BASE: ASR COMPLETE
46. EPHRATA PATTERN BOMBING RANGE: OEW
47. EVOR PHILLIPS SUPERFUND SITE, NEW JERSEY
48. FAIRCHILD AFB ATLAS E MISSILE S-4:
49. FAIRCHILD AFB ATLAS E S-3:
50. FAIRCHILD ATLAS E S-9:
51. FEDERAL CENTER COMPLEX: HTRW
52. FEDERAL CENTER COMPLEX: PRP PROJECT (AKA BANNISTER)
53. FORBES AFB ATLAS FAC S-5: PA/INPR
54. FORBES AFB ATLAS FAC S-9: CONFIRMATION STUDY
55. FORBES AFB-AF FAC S-6:
56. FORBES AFB-AF FAC S-7: HTRW
57. FORBES AFB-AF FAC S-8: CON/HTRW
58. FORBES AFB: other HTRW areas
59. FORDLAND AFS P-68:
60. FOREST GLEN, NY SUPERFUND - PRP RA OVERSIGHT
61. FOREST PARK RECREATION CAMP: ASR
62. FORT COLUMBIA MIL. RES.: ASR
63. FORT STEVENS MIL RES: UST'S
64. FORT TOWNSEND: ASR
65. FORT WORDEN:
66. FORT WORDEN: Landfill
67. FRIED INDUSTRIES, NJ SUPERFUND SITE, REMEDIAL DESIGN
68. FT CARSON SUBPART X APPLICATION UPDATE
69. FT CROWDER: ASR COMPLETE
70. FT LEAVEN PRE GFPR IRP SITES
71. FT LEONARD WOOD MACHINE GUN RANGE: PA/INPR
72. FT LEONARD WOOD REMEDIAL INVESTIGATION FLW059/FLW037
73. FT LEONARD WOOD RIFLE QUALIFYING RANGE: PA/INPR
74. FT. RILEY SITE INVESTIGATION OB/OD GROUNDS (RANGE 16)
75. FT. LEAV. COST REIM. AE CONTRACT GOAL REMOVAL OF SITE FROM RCRA PERMIT
76. FT. LEONARD WOOD GENERAL ENVIRONMENTAL PROGRAM SUPPORT - DATA COLL/REP - RCRA ETC
77. GARDEN CITY AAF: LIMITED RI/FS
78. GARDEN CITY AUX FLD #2: 1 UST/EM TO LOCATE
79. GARDEN CITY AUX FLD #2: PA/INPR
80. GARDEN STATE CLEANERS, NJ SUPERFUND - RD OVERSIGHT
81. GATEWAY ARMY AMMUNITION PLANT: PA/INPR
82. GENERAL MOTORS, MASSENA, NY SUPERFUND - PRP RA OVERSIGHT
83. GENZALE, NY SUPERFUND SITE - REMEDIAL DESIGN - GROUNDWATER REMEDIATION SYS
84. GEO WRIGHT AIR FORCE BASE:
85. GIDEON AUX FLD #3: PA/INPR
86. GLEN RIDGE, NJ SUPERFUND SITE REMEDIAL DESIGN
87. GLOBAL LANDFILL (OU#2), NJ, SUPERFUND SITE, HWES-DESIGN
88. GLOBAL LANDFILL, NJ SUPERFUND - TECHNICAL ASSISTANCE FOR RD
89. GM MASSENA, NY SUPERFUND - PRP OVERSIGHT TECHNICAL ASSISTANCE
90. GREAT BEND PBR #2: OEW PROJECT
91. GRIFFISS AFB BRAC 95 ENVIRONMENTAL PROGRAM



92. GSA FEDERAL SUPPLY DEPOT, BELLE MEAD, NJ REMEDIAL INVESTIGATION
93. HERINGTON AAF: ASR RAC
94. HERINGTON RIFLE RANGE: POTENTIALLY 2 TANKS
95. HOOKER (HYDE PARK) LANDFILL, NY SUPERFUND - PRP OVERSIGHT TECHNICAL ASSISTANCE
96. HOOKER CHEMICAL/RUCCO, NY SUPERFUND-RD OVERSIGHT
97. HORSESHOE ROAD COMPLEX, NJ REMEDIAL DESIGN
98. HUDSON RIVER PCBS, NY SUPERFUND SITE, HAZARDOUS WASTE ENFORCEMENT SUPPORT-CONST
99. HUTCHINSON NAS: ASR
100. Higgins Disposal, NJ Superfund Site, Hazardous Waste Enforcement Support - Const
101. Hooker Hyde Park, NY Superfund Site, Oversight of O&M
102. IDAHO NAT. ENGR. LABORATORY: ASR COMPLETE
103. IMPERIAL OIL/CHAMPION (OU #3), NJ SUPERFUND SITE, REMEDIAL DESIGN
104. INDEPENDENCE AAF: OEW LMS ASR-NOFA
105. INDEPENDENCE SATELLITE POW CAMP: PA/INPR
106. INVES. & ASSESS IMA-AR/YAKIMA/FORT CARSON/AEC/MISC ENVIRONMENTAL
107. IOWA RCRA SUPPORT
108. JEFFERSON BARRACKS RIF RG: PA/INPR
109. JONES CHEMICAL
110. JUNIPER FOREST SUR TRG: PA/INPR
111. KANSAS CITY RECORD CENTER: PA/INPR
112. KAUFFMAN & MINTEER, NJ SUPERFUND SITE, REMEDIAL ACTION-CONSTRUCTION
113. KCDA NIKE 80-RADAR AREA: PA/INPR
114. KCDA NIKE BATTERY 10: PA/INPR
115. KCDA NIKE BATTERY 30: PA/INPR
116. KCDA NIKE BATTERY 60: PCBs at Control Site
117. KINGSLEY FIELD: DISPOSAL SITES
118. KIRKSVILLE AFS P-64: Tanks
119. Kansas Army Ammunition Plant - BRAC-ER 05 - several projects by WBS - Replacement project for P2 #153284
120. LAMBERT FLD: PA/INPR
121. LARSON AFB TITAN I MISSILE FACILITY S-1:
122. LIBERAL AAF: ASR
123. LIBERTY INDUSTRIAL, NY SUPERFUND SITE, HAZARDOUS WASTE ENFORCEMENT SPT, DESIGN
124. LINCOLN PARK, CO SUPERFUND SITE - FIVE YEAR REVIEW
125. LITUNGSTEN (GLEN COVE CREEK) (OUR), NY SUPERFUND SITE REMEDIAL DESIGN
126. LONE ELK COUNTY PARK: PA/INPR
127. LUDLOW SAND & GRAVEL, NY REMEDIAL DESIGN
128. LUDLOW SAND & GRAVEL, NY SUPERFUND SITE, OTHER CONSTRUCTION RESPONSE
129. MALDEN AIR BASE: PA/INPR
130. MALTA TEST STA: MALTA ROCKET FUEL AREA PRP PROJECT
131. MANCHESTER ANNEX: UST
132. MARK TWAIN IND PARK: PA/INPR
133. MARSHALL SATELLITE POW CAMP: PA/INPR
134. MARTIN AARON
135. MATTIACE PETROLEUM, NY SUPERFUND SITE, HAZARDOUS WASTE ENFORCEMENT SPT - GENERAL
136. MAULSBY AUX FLD #2: PA/INPR
137. MAYWOOD CHEMICAL, NJ SUPERFUND SITE, FIVE-YEAR REVIEW
138. MCGRW EDISON, IA SUPERFUND SITE, FIVE-YEAR REVIEW
139. METALTEC, NJ SUPERFUND - TECHNICAL ASSISTANCE FOR FS
140. MIAMI INT'L AIRPORT: MIAMI INTL AIRPORT PRP PROJECT
141. MIDVALE SLAG, UT SUPERFUND SITE, FIVE-YEAR REVIEW
142. MIL PERSON RECORD CENTER: PA/INPR
143. MOHONK ROAD, NY SUPERFUND SITE, LONG TERM REMEDIAL ACTION
144. MONTCLAIR/WEST ORANGE, NJ SUPERFUND SITE REMEDIAL DESIGN
145. MONTGOMERY TOWNSHIP, NJ SUPERFUND - RD/RA
146. MOUAT INDUSTRIES, MT SUPERFUND SITE - FIVE YEAR REVIEW
147. MOUNTAIN HOME AF RGE #3: ASR
148. MUNICIPAL AP-HUTCHINSON: PA/INPR
149. NAS-QUILLAYUTE: HTRW
150. NASCOLITE, NJ SUPERFUND - RD
151. NAV AIR STA, TILLAMOOK: 8 UST'S
152. NEBRASKA ORDNANCE PLANT: OPERABLE UNIT 1
153. NEW HANOVER COUNTY AIRPORT BURN PIT PRP PROJECT
154. NIAG FALLS AR CHEM PLT: PRP
155. NIKE HERCULES SL-60: PA/INPR
156. NL INDUSTRIES, NJ SUPERFUND SITE, HAZARDOUS WASTE ENFORCEMENT SPT - GENERAL
157. NORTH BEND AIRPORT: ASR NOFA
158. NORTHWEST MANEUVER AREA: OEW PROJECT EE/CA
159. O'REILLY GEN HOSPITAL: PA/INPR
160. OLATHE NAVAL AIR STATION: WASHRACK, DRUMS, CONC.US
161. OLD ROOSEVELT FIELD, NY SUPERFUND SITE, OTHER TECHNICAL ASSISTANCE, VALUE ENGINEERING SCREEN
162. OLEAN WELL FIELD, NY SUPERFUND-PRP OVERSIGHT - RD
163. ORDNANCE OPERABLE UNIT 2
164. ORRICK SATELLITE POW CAMP: PA/INPR
165. POCATELLO MIL AF:
166. POCATELLO MOV TARGET RANG: ASR
167. POHATCONG VALLEY (OU#1), NJ SUPERFUND SITE, HAZ WASTE ENFORCEMENT SPT-DESIGN





168. PORT ANGELES COMBAT RANGE: ASR COMPLETE
169. POTTAWATOMIE PBR #1: HND TO PERFORM EE/CA
170. PRATT AAF: ASR COMPLETE
171. PRATT AAF: oew project
172. PRATT PBR #1: New OEW
173. Puget Sound Naval Puget Sound Naval Ammo Depot: HTRW
174. QUANTA RESOURCES, NJ SUPERFUND, HAZ WASTE ENFORCEMENT SUPPORT
175. RADIATION TECHNOLOGY (OU2), NJ SUPERFUND SITE RI/FS OVERSIGHT
176. RADIATION TECHNOLOGY, NJ SUPERFUND-HAZARDOUS WASTE ENFORCEMENT SUPPORT-DESIGN
177. RADON TESTING, ATCHISON CAVES, ATCHISON, KANSAS
178. REDMOND AAF: PA/INPR
179. REICH FARM, NJ SOILS INVESTIGATION
180. REYNOLDS METALS, NY SUPERFUND-PRP RA OVERSIGHT
181. RICHARDS-GEBAUR AFB: PRP PROJECT
182. RICHARDSON HILL ROAD LANDFILL, NY SUPERFUND SITE - HAZ WASTE ENF SUPPT - CONSTR
183. RISCO AUX FLD #3: PA/INPR
184. RIVERFRONT, MO SUPERFUND SITE
185. ROCKAWAY BOROUGH WELL FIELD, NJ SUPERFUND SITE, RD TECHNICAL ASSISTANCE
186. ROCKY HILL, NJ SUPERFUND - RD/RA GROUNDWATER PUMP AND TREAT SYSTEM
187. ROEBLING STEEL, NJ SUPERFUND SITE REMEDIAL DESIGN
188. ROLLING KNOLLS LANDFILL, NJ SUPERFUND SITE OVERSIGHT OF RI/FS
189. ROSEBURG RIFLE RANGE: FURTHER ACTION BY HND RE
190. ROSECRANS ARMY AIR FIELD & NATIONAL GUARD: OE
191. S E OREGON GUNNERY RANGE: MMRP
192. SADDLE MT TAR RG: PA/INPR
193. SALINA WASTE ANNEX: PA/INPR
194. SAND PT NAS-MAGNUSON PK: PA/INPR
195. SCHILLING AFB: CWM Project
196. SCHILLING AFB: SHILLING AFB PRP PROJECT
197. SCIENTIFIC CHEMICAL PROCESSING, NJ SUPERFUND - HAZ WASTE ENFORCMNT
198. SEDALIA AAF RIFLE RANGE: ASR COMPLETE
199. SEDALIA SATELLITE POW CAMP: PA/INPR
200. SHENANDOAH ROAD, NY SUPERFUND SITE-HAZ WASTE ENFORCEMENT SUPPORT
201. SHIELDALLOY CORPORATION, NJ SUPERFUND SITE, HAZ WASTE ENFORCEMENT SPT-DESIGN
202. SIDNEY LANDFILL, NY SUPERFUND SITE, REMEDIAL ACTION OVERSITE
203. SIDNEY LANDFILL, NY, NJ SUPERFUND, HAZARDOUS WASTE ENFORCEMENT SUPPORT
204. SLOP PRELIMINARY INVESTIGATION
205. SMOKY HILL AIR-AIR GNRY RANGE: ASR COMPLETE
206. SMOLAN SATELLITE POW CAMP: PA/INPR
207. SOLVENT SAVERS, NY SUPERFUND SITE, TECH ASSIST
208. ST LOUIS MEDICAL DEPOT: PA/INPR REVIEW & DOCUMENT BASIS OF THE PROPERTY STATUS
209. ST LOUIS NAVAL AIR STATION AREA 1: PA/INPR
210. ST LOUIS ORD SUB-DEPOT: PA/INPR
211. ST. CHARLES NATIONAL GUARD TARGET RANGE: PA/INPR
212. ST. LOUIS ORDNANCE PLANT: PA/INPR
213. ST. LOUIS TANK ARMOUR: PA/INPR
214. ST.LOUIS ORDNANCE PLANT HANLEY AREA
215. STROTHER FIELD: STROTHER FLD PRP PROJECT
216. SWAN FALLS BOMBING RANGE: ASR
217. SYNCON RESINS, NJ SUPERFUND SITE, REMEDIAL DESIGN
218. Scientific Chemical Processing, NJ, Remedial Design Oversight Activities
219. TARGET S : PA/INPR
220. TOPEKA AAF RIFLE RANGE: ASR COMPLETE RAC 5
221. TOPEKA AIR FORCE STATION:
222. TRI-CITIES BARREL, NY SUPERFUND SITE, HAZARDOUS WASTE ENFORCEMENT SUPPT - DESIGN
223. TYSON VALLEY POWDER FARM
224. U.S. RADIUM, NJ SUPERFUND SITE TECHNICAL ASSISTANCE RI/FS
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228. UPPER TEN MILE CREEK, MT SUPERFUND SITE - FIVE YEAR REVIEW
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